

## LISTA DE LUCRARI

Prof. Dr. Alina-Diana Zamfir

### TEZA DE DOCTORAT

**ELECTROSPRAY IONIZATION MASS SPECTROMETRY, 2001**, SUPERVISOR: Prof. Dr. Nicolae Palibroda; **Babes-Bolyai University, Cluj-Napoca, Faculty of Physics**

### TEZA DE ABILITARE IN BIOFIZICA(Germania, 2005)

**High Performance Electrospray Mass Spectrometric Glycoscreening in Biomedicine, 2005**, UNIVERSITY OF MÜNSTER, MEDICAL SCHOOL, GERMANY

### TEZA DE ABILITARE IN FIZICA (Romania, 2013)

**Development of Electrospray Mass Spectrometry-Based Methods for Glycan Analysis in Biomedical Research, 2013**, WEST UNIVERSITY OF TIMISOARA, FACULTY OF PHYSICS

### CARTI/MANUALE

C1. Metode fizice de studiu materialelor solide (indrumator de laborator)

M.A. Balint, **A. D. Zamfir**

West University of Timisoara, Ed., 1995

C2. Metode fizico-chimice de analiza

**A.D. Zamfir**, N. Dinca, "Aurel Vlaicu", Univ. Arad Ed., 2005, ISBN: 973-752-012-2

C3. Advanced microchip ionization systems for mass spectrometry and applications

**A. D. Zamfir**, Ed. Canonica, Cluj-Napoca, 2008, ISBN 978-973-88608-7-2

### EDITOR/GUEST EDITOR

1. Applications of Mass Spectrometry in Life Safety

C. Popescu, **A.D. Zamfir**, N. Dinca (editori)

Ed. *Springer Verlag*, Germania, ISBN 978-1-4020-8810-0 (Print) 978-1-4020-8811-7 (Online), 238 pg., 2008, © *Springer*

2022-2023 Guest Editor: *Molecules* (impact factor 4.6)

2024 Guest Editor: *Frontiers in Molecular Biosciences* (impact factor 5.0)

### CAPITOLE DE CARTE LA EDITURI INTERNATIONALE

1. Protein carbohydrate analysis: gel-based staining, liquid chromatography, mass spectrometry, and microarray screening

I. Shin, **A. D. Zamfir**, Bin Ye

*Methods Mol. Biol.* 44, 19-39, 2008; *Tissue Proteomics-Pathways, Biomarkers, and Drug Discovery*, vol. 44, pg. 19-39, 2008; ISSN: 1064-3745; B. Liu Ed., © *Humana Press Inc.*, Totowa, N.J., USA

2. Structural analysis of chondroitin sulfate disaccharides by electrospray ionization high capacity ion trap mass spectrometry

A. Muresan, M. Galusca, D. G. Seidler, N. Dinca, **A. D. Zamfir**

in: *Applications of Mass Spectrometry in Life Safety*, ISBN 978-1-4020-8810-0; pg. 85-95; 2008, © *Springer*

3. Mapping and sequencing of gangliosides from anencephaly by electrospray ionization high capacity ion trap mass spectrometry

C. Mosoarca, Ž. Vukelić, **A.D. Zamfir**

in: *Applications of Mass Spectrometry in Life Safety*, ISBN 978-1-4020-8810-0; pg. 71-82; 2008, © *Springer*

4. Electrospray Ionization tandem mass spectrometric investigation of essential oils from *Melissa officinalis* (Labiatae Family) and *Pellargonium ssp.* (Geraniaceae Family)

C. Toma, I.B. Pancan, M. Chirita, F.M. Vata, **A.D. Zamfir**

in: *Applications of Mass Spectrometry in Life Safety*, ISBN 978-1-4020-8810-0; pg. 213-220; 2008, © *Springer*

5. Brain chondroitin/dermatan sulfate: from cerebral tissue to fine structure. Extraction, preparation and fully automated chip-electrospray mass spectrometric analysis

**A. D. Zamfir**, C. Flangea, A.Serb, E. Sisu, L. Zagrean, A. Rizzi, D.G. Seidler

*Methods Mol. Biol.* 836, 145-159, 2012; Françoise Rédini (ed.), *Proteoglycans: Methods and Protocols*, *Methods in Molecular Biology*, vol. 836, DOI 10.1007/978-1-61779-498-8\_10, ISSN: 1064-3745; © *Springer*

6. Levansucrases of *Pseudomonas* bacteria: novel approaches for protein expression,

assay of enzymes, fructooligosaccharides and heterooligofructans

T. Alamae, T. Visnapuu, K. Mardo, A. Mae, **A. D. Zamfir**

*Carbohydr. Chem.* 38, 176–191, 2012, edited by Amelia Pilar Rauter, Thisbe Lindhorst; ISBN: 978-1-84973-439-4 © *The Royal Society of Chemistry, UK*

7. Separation and identification of glycoforms by capillary electrophoresis with electrospray ionization mass spectrometric detection

**A. D. Zamfir**, C. Flangea, A. Serb, A.-M. Zagrean, A. Rizzi, E. Sisu

*Methods Mol. Biol.* 951, 145–169, 2013; Jennifer J. Kohler and Steven M. Patrie (eds.), *Mass Spectrometry of Glycoproteins: Methods and Protocols*, *Methods in Molecular Biology*, vol. 951, DOI 10.1007/978-1-62703-146-2\_11, ISSN: 1064-3745, © *Springer*.

8. Nanochips for mass spectrometry and applications in biomedical research.

**A.D. Zamfir**

in: *Research Horizons of Nanosystems: Structure, Properties and Interactions*, 2014, 386–443, ISBN: 978-1926895-90-1 © *Apple Academic Press*, Ontario-New Jersey, Canada-USA

9. Nanofluidics-based mass spectrometry. Applications for biomarker discovery in lysosomal storage diseases.

M Sarbu, **A.D. Zamfir**

in: *Nanoparticles: Promises and Risks*, 2015, 137–165, ISBN: 978-3-319-11727-0 © *Springer*

10. Sustainable nanosystem development for mass spectrometry. Applications in proteomics and glycomics

L. Popescu, A.C. Robu, **A.D. Zamfir**

in: *Sustainable Nanosystems Development, Properties and Applications*, 2016, 535–568, ISSN: 2327-5448 © *IGI Global*, Hershey, PA, USA

11. Microfluidics-mass spectrometry of protein-carbohydrate interactions: applications to the development of therapeutics and biomarker discovery.

**A.D. Zamfir**

*Methods Mol. Biol.* 1647, 109–128, 2017

12. Mass spectrometry for cancer biomarker discovery

Albulescu R., Petrescu A.J., Sarbu M., Grigore A., Ica R., Munteanu C.V.A., Albulescu A., Militaru I. V, **A.D. Zamfir**, Petrescu S., Tanase C.

*IntechOpen*, 2019 DOI: 10.5772/intechopen.85609

13. Liquid-phase separation methods hyphenated to electrospray ionization mass spectrometry for structural analysis of chondroitin/dermatan sulfate

**A. D. Zamfir**, R. Ica, M. Sarbu

in *Carbohydrate Analysis by Modern Liquid Phase Separation Techniques 2-nd Edition* (Editor, Ziad El Rassi), eBook ISBN: 978-012-824-5125; Paperback ISBN: 978-012-821-4473, pp. 529–562, 2021; Ed. Elsevier

14. Modern techniques for separation, mass spectrometric detection and characterization of glycolipids

M. Sarbu, **A. D. Zamfir**

in *Carbohydrate Analysis by Modern Liquid Phase Separation Techniques 2nd Edition* (Editor, Ziad El Rassi), eBook ISBN: 978-012-824-5125; Paperback ISBN: 978-012-821-4473, pp. 485–527, 2021; Ed. Elsevier

15. Capillary zone electrophoresis-electrospray ionization tandem mass spectrometry for total analysis of chondroitin/dermatan sulfate oligosaccharides

**A. D. Zamfir**

*Methods Mol. Biol.* 2022, 2531, 163–184.

#### **ARTICOLE IN EXTENSO WEB OF SCIENCE (#Corresponding Author)**

1. Capillary electrophoresis and off-line CE/ESI-QTOF tandem MS of carbohydrates

**A.D. Zamfir**, S. König, J. Althoff, J. Peter-Katalinic

*J. Chromatogr. A* 895, 291–299, 2000

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2. Glycoscreening by sheathless on-line capillary electrophoresis/electrospray quadrupole time-of flight tandem mass spectrometry

**A.D. Zamfir**, J. Peter-Katalinic

*Electrophoresis* 22, 2448–2457, 2001

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3. A capillary electrophoresis and off-line capillary electrophoresis/electrospray ionization quadrupole time-of-flight tandem mass spectrometry approach for ganglioside analysis

**A.D. Zamfir**, Ž. Vukelic, J. Peter-Katalinic

*Electrophoresis* 23, 2894-2903, 2002

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4. Structural characterization of chondroitin/dermatan sulfate oligosaccharides from bovine aorta by capillary electrophoresis and electrospray ionization quadrupole time-of-flight tandem mass spectrometry

**A. D. Zamfir**, D. Seidler, H. Kresse, J. Peter-Katalinic  
*Rapid Commun. Mass Spectrom.* 16, 2015-2024, 2002

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5. Characterization of peptides by capillary zone electrophoresis and electrospray ionization quadrupole time-of-flight tandem mass spectrometry

L. Bindila, **A.D. Zamfir**, J. Peter-Katalinic  
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6. Glucosylsulfones. Valuable syntons in obtaining C,O-glycosides

E. Sisu, V. Rusu, I. Sisu, **A.D. Zamfir**, J. Peter-Katalinic, C. Csunderlik  
*Revista de Chimie* 53, 779-781, 2002

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7. The synthesis of lactose block - a valuable synthon in glycosphingolipids synthesis

E. Sisu, I. Sisu, **A.D. Zamfir**, N. Dinca, C. Csunderlik, V. Rusu, J. Peter-Katalinic  
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**A.D. Zamfir**, D. Seidler, H. Kresse, J. Peter-Katalinic  
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9. Sialylation analysis of O-glycosylated sialylated peptides from urine of patients suffering from Schindler's disease by Fourier transform ion cyclotron resonance mass spectrometry and sustained off-resonance irradiation collision-induced dissociation

M. Froesch, L. Bindila, **A.D. Zamfir**, J. Peter-Katalinic  
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10. New glycosyl derivatives of 5-substituted-3-mercapto-1,2,4-triazole

E. Sisu, A. Lascu, V. Bercean, M.T. Caproiu, **A.D. Zamfir**, I. Sisu, C. Neanu, C. Csunderlik, V. Rusu, J. Peter-Katalinic  
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11. Fully automated chip-based mass spectrometry for complex carbohydrate system analysis

**A.D. Zamfir**, S. Vakhrushev, A. Sterling, H. Niebel, M. Allen, J. Peter-Katalinic  
*Anal. Chem.* 76, 2046-2054, 2004

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12. On-line sheathless capillary electrophoresis/nanoelectrospray ionization-tandem mass spectrometry for the analysis of glycosaminoglycan oligosaccharides

**A.D. Zamfir**, D. Seidler, E. Schonherr, H. Kresse, J. Peter-Katalinic  
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**A.D. Zamfir**, Z. Vukelic, L. Bindila, R. Almeida, A. Sterling, M. Allen, J. Peter-Katalinic  
*J. American Soc. Mass Spectrom.* 15, 1649-1657, 2004

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14. Off-line capillary electrophoresis/fully automated chip-based electrospray ionization quadrupole time-of-flight mass spectrometry and tandem mass spectrometry for glycoconjugate analysis

L. Bindila, R. Almeida, A. Sterling, M. Allen, J. Peter-Katalinic, **A.D. Zamfir**<sup>#</sup>  
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15. Coupling of fully automated chip electrospray to Fourier transform ion cyclotron resonance mass spectrometry for high-performance glycoscreening and sequencing

- M. Froesch, L. Bindila, G. Baykut, M. Allen, J. Peter-Katalinić, **A.D. Zamfir**<sup>#</sup>  
*Rapid Commun. Mass Spectrom.* 18, 3084-3092, 2004  
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16. A thin chip microsyrayer system coupled to Fourier transform ion cyclotron resonance mass spectrometry for glycopeptide screening  
L. Bindila, M. Froesch, N. Lion, Ž. Vukelic, J. Rossier, H. Girault, J. Peter-Katalinić, **A.D. Zamfir**<sup>#</sup>  
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S. Y. Vakhrushev, **A.D. Zamfir**, J. Peter-Katalinić  
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**A.D. Zamfir**, J. Peter-Katalinić  
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**A.D. Zamfir**, L. Bindila, N. Lion, M. Allen, H. H. Girault, J. Peter-Katalinic,  
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20. Screening and sequencing of complex sialylated and sulfated glycosphingolipid mixtures by negative ion electrospray Fourier transform ion cyclotron resonance mass spectrometry  
Ž. Vukelic\*, **A.D. Zamfir**\*, L. Bindila, M. Froesch, S. Usuki, R.Yu, J. Peter-Katalinić  
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21. Thin chip microsyrayer system coupled to quadrupole time-of-flight mass spectrometer for glycoconjugate analysis  
**A.D. Zamfir**, N. Lion, Ž. Vukelic, L. Bindila, J. Rossier, H.Girault, J.Peter-Katalinić  
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22. Sheathless reverse polarity capillary electrophoresis/electrospray mass spectrometry for the analysis of underivatized glycans  
L. Bindila, J. Peter-Katalinić, **A.D. Zamfir**<sup>#</sup>  
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23. Determination of Mammillaria gracillis N-glycan patterns by ESI Q-TOF mass spectrometry  
B. Balen, **A.D. Zamfir**, S. Vakhrushev, M. Krsnik-Rasol, J. Peter-Katalinić  
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E. Sisu, Wouter T.E. Bosker, Wilhem Norde, Teddy M. Slaghek, Jan W. Timmermans, J. Peter-Katalinić, M. A. Cohen-Stuart, **A.D. Zamfir**<sup>#</sup>  
*Rapid. Commun. Mass Spectrom.* 20, 209-218, 2006  
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25. Glycoproteomic survey of Mammillaria gracillis tissues grown in vitro  
B. Balen, M. Krsnik-Rasol, **A.D. Zamfir**, J. Milosevic, S.Y. Vakhrushev, J. Peter-Katalinić  
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26. Analysis of human hippocampus gangliosides by fully-automated chip-based nanoelectrospray tandem mass spectrometry  
Z.Vukelic, M.Zarei, J.Peter-Katalinić, **A.D. Zamfir**<sup>#</sup>  
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F.H. Cederkvist\*, **A.D. Zamfir**\*, S. Bahrke, V.G. Eijnsink, M. Sorlie, J. Peter-Katalinić, M.G. Peter; \*equal contribution  
*Angew. Chem. Int. Ed. Engl.* 45, 2429-34, 2006  
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30. Galactosaminoglycan function and oligosaccharide structure determination  
D. G. Seidler, J. Peter-Katalinić, **A.D. Zamfir**#  
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**A. D. Zamfir**  
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M. Morman\*, **A. D. Zamfir**\*, D.G. Seidler, H. Kresse, J. Peter-Katalinić; \*equal contribution  
*J. American. Soc. Mass Spectrom.* 18, 179-187, 2007  
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I. Ienascu, A.X. Lupea, I. Popescu, C. Mosoarca, **A.D. Zamfir**  
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**A.D. Zamfir**, C. Flangea, A. Serb, E.Sisu, N. Dinca, P. Bruckner, D. G. Seidler  
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C. Flangea, A. Serb, C. Schiopu, S. Tudor, E. Sisu, D. G. Seidler, **A. D. Zamfir**<sup>#</sup>  
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A.Serb, C. Schiopu, C. Flangea, E. Sisu, **A. D. Zamfir**<sup>#</sup>  
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C. Flangea, C. Schiopu, E. Sisu, A.Serb, M. Przybylski, D. G. Seidler, **A. D. Zamfir**<sup>#</sup>  
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C. Schiopu, A. Serb, F. Capitan, C. Flangea, E. Sisu, Z. Vukelic, M. Przybylski, **A. D. Zamfir**<sup>#</sup>  
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I.M.C Ienascu, A.X. Lupea, I.M. Popescu, M.A. Padure, **A.D. Zamfir**  
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D. Condrat, C. Mosoarca, **A.D. Zamfir**, F. Crişan, M. Szabo, A. Lupea  
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M.D. Stanescu, F. Harja, C. Mosoarca, **A.D. Zamfir**  
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50. Application of chip-based nanoelectrospray ion trap mass spectrometry to compositional and structural analysis of gangliosides in human fetal cerebellum  
C. Mosoarca, R.M. Ghiulai, C. R. Novaconi, Ž. Vukelić, A.Chiriac, **A.D. Zamfir**<sup>#</sup>  
*Anal. Lett.* 44, 1036-1049, 2011  
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51. Modern developments in mass spectrometry of chondroitin and dermatan sulfate glycosaminoglycans  
E. Sisu, C. Flangea, A.Serb, **A. D. Zamfir**<sup>#</sup>

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**A. D. Zamfir**, C.Flangea, F.Altmann, A. M. Rizzi

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*Electrophoresis* 32, 1591-1609, 2011

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*J. Biotechnol.* 155, 338-349, 2011

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*J. American Soc. Mass Spectrom.* 22, 2145-2159, 2011

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M. Stefanut, A. Cata, R. Pop, C. Mosoarca, **A.D. Zamfir**<sup>#</sup>

*Anal. Lett.* 44, 2843-2855, 2011

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*Electrophoresis*, 33, 1778-1786, 2012

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## ABSTRACTURI WOS

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ORAL PRESENTATION

22. Capillary Electrophoresis and Nanoelectrospray Ionization Mass Spectrometry on Peptides  
L. Bindila, **A.D. Zamfir**, J. Peter-Katalinić  
International Anniversary Conference, Timișoara, Romania, July 5, 2002, Pp11  
ORAL PRESENTATION
23. On-line Sheathless Capillary Electrophoresis-Nanoelectrospray Mass Spectrometry for Bioanalyses  
L. Bindila, **A.D. Zamfir**, J. Peter-Katalinić  
International Conference of Nanoanalytics and Advanced Materials, Timișoara, Romania, 9-21 Sept., 2002  
ORAL PRESENTATION
24. Massenspektrometrische Untersuchung von Glycosaminoglykanen  
J. Peter-Katalinić, **A.D. Zamfir**, M. Mormann, D. Seidler, H. Kresse  
SFB 492 Symposium, Universität Münster, Oct. 3, 2002  
ORAL PRESENTATION
25. Identification of Eicosasaccharide Structures in Glycosaminoglycans from Human Decorin by online CE/ESI-MS and tandem MS  
**A.D. Zamfir**, D. Seidler, H. Kresse, J. Peter-Katalinić  
7<sup>th</sup> Conference of the American Society of Glycobiology, Boston, MA, USA, Nov. 9-13, 2002  
ORAL PRESENTATION
26. Identification of Oligosaccharides in Glycosaminoglycans from Human Decorin by on-line CE/ESIMS and tandem MS  
**A.D. Zamfir**, D. Seidler, H. Kresse, J. Peter-Katalinić  
XIII<sup>th</sup> Joint Meeting on Glycobiology, Raestfeld, Germany, Nov. 21-23, 2002  
POSTER PRESENTATION
27. Novel Strategies Employing on-line Sheathless Capillary Electrophoresis Nanoelectrospray Ionization Mass Spectrometry for Glycoscreening  
**A.D. Zamfir**, J. Peter-Katalinić  
International Conference of Physics, Timișoara, Romania, Nov.28-29, 2002  
INVITED LECTURE
28. Advanced of CE/tandem MS Glycoscreening in Biomedical Research  
J. Peter-Katalinić, **A.D. Zamfir**  
HPCE 2003, 16<sup>th</sup> Int. Symposium on Microscale Separations and Analysis, Jan.16-23, 2003, San Diego, CA, USA  
ORAL PRESENTATION
29. Considerations of CE-QTOF and FTICR MS for Glycomics of Glycosaminoglycans  
J. Peter-Katalinić, **A.D. Zamfir**, M. Mormann, D. Seidler, H. Kresse  
5<sup>th</sup> Igler MS Tage, Universität Innsbruck, Austria, Feb. 19-21, 2003  
ORAL PRESENTATION
30. Capillary Electrophoresis/Electrospray Ionization Mass Spectrometry of Glycoconjugates  
**A.D. Zamfir**  
Workshop on Mass Spectrometry of Glycoconjugates at the German Society for Mass Spectrometry Conference, Münster, Germany, 9-12 March, 2003  
INVITED LECTURE
31. CE/VE-MS/MS for Structural Analysis of Glycosaminoglycans from Human Skin Fibroblast Decorin  
**A.D. Zamfir**, D. Seidler, H. Kresse, J. Peter-Katalinić  
German Society for Mass Spectrometry Conference, Münster, Germany, 9-12 March, 2003  
ORAL PRESENTATION
32. Sheathless CE/ESI-MS and tandem MS for Biomedical Analysis  
**A.D. Zamfir**, J. Peter-Katalinić  
International Symposium on Instrumentalized Analytical Chemistry, Düsseldorf, 25-27 March, 2003  
ORAL PRESENTATION
33. Glycomics of Glycosaminoglycans by Capillary Electrophoresis/Quadrupole Time-of-Flight Tandem Mass Spectrometry  
**A.D. Zamfir**, D. Seidler, H. Kresse, J. Peter-Katalinić  
Proc. of the 51<sup>st</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, Montreal, Canada, 8-12 June, 2003  
ORAL PRESENTATION
34. MS to MS/MS Automatic Switching for Glycoscreening in Congenital Disorders of Glycosylation

S. Vakhrushev, **A.D. Zamfir**, J. Peter-Katalinić  
Proc. of the 51<sup>st</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, Montreal, Canada, 8-12 June, 2003  
POSTER PRESENTATION

35. Mapping of O-Glycosylated Amino Acids Related to Schindler Disease by Negative Ion Nano ESI FTICR and SORI CID at 9.4 T  
M. Froesch, **A.D. Zamfir**, J. Peter-Katalinić  
Proc. of the 51<sup>st</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, Montreal, Canada, 8-12 June, 2003  
POSTER PRESENTATION
36. CE-QTOF and FTICR MS for Glycomics of Glycosaminoglycans  
**A.D. Zamfir**, D. Seidler, H. Kresse, M. Mormann, J. Peter-Katalinić  
16<sup>th</sup> International Mass Spectrometry Conference, Edinburgh, Scotland, U.K., Aug. 31-Sept 5, 2003  
POSTER PRESENTATION
37. Mapping and Sequencing of Carbohydrates by Fully Automated Chip-Based Nanospray Quadrupole Time-of-Flight Tandem Mass Spectrometry  
**A.D. Zamfir**, A. Sterling, S. Vakhrushev, H. Niebel, M. Allen, J. Peter-Katalinić  
16<sup>th</sup> International Mass Spectrometry Conference, Edinburgh, Scotland, U.K., Aug. 31-Sept 5, 2003  
ORAL PRESENTATION
38. Capillary Electrophoresis/Electrospray Ionization Mass Spectrometry for Glycoconjugate Analysis  
**A.D. Zamfir**, J. Peter-Katalinić  
9<sup>th</sup> International Summer School on Biophysics and Supramolecular Structure, Rovinj, Croatia, 14-26 Sept. 2003  
POSTER PRESENTATION
39. Identification of Glycosaminoglycan Glycoforms by Mass Spectrometry  
**A.D. Zamfir**, D. Seidler, H. Kresse, M. Mormann, J. Peter-Katalinić  
Charite-Universitätsmedizin Berlin, Nov. 14, 2003  
ORAL PRESENTATION
40. Identification of Sialylated and Sulfated Glycosphingolipids by FTICR MS and SORI CID Tandem MS  
L. Bindila, M. Froesch, **A.D. Zamfir**, S. Usuki, R. K. Yu, J. Peter-Katalinić, Ž. Vukelić  
XIV<sup>th</sup> Joint Meeting on Glycobiology, Lille, France, 20-22 Nov. 2003  
POSTER PRESENTATION
41. Analysis and Sequencing of Sialylated Glycopeptides from Urine of Patients Suffering from Schindler Disease by NanoESI FTICR SORI CID Tandem MS  
M. Froesch, L. Bindila, **A.D. Zamfir**, J. Peter-Katalinić  
XIV<sup>th</sup> Joint Meeting on Glycobiology, Lille, France, 20-22 Nov. 2003  
POSTER PRESENTATION
42. Combination of Computational Algorithm and Fully Automated Chip-Based Nanospray Quadrupole Time-of-Flight Tandem Mass Spectrometry for Analysis of Complex Glycoconjugate Mixtures  
S. Vakhrushev, **A.D. Zamfir**, A. Sterling, H. Niebel, M. Allen, J. Peter-Katalinić  
XIV<sup>th</sup> Joint Meeting on Glycobiology, Lille, France, 20-22 Nov. 2003  
ORAL PRESENTATION
43. Potentials of Modern Mass Spectrometric Methods in Neuroscience Research and Neuropathological Diagnostics: Mapping and Sequencing of Brain Gangliosides  
Ž. Vukelić, V. Metelmann-Strupat, **A.D. Zamfir**, L. Bindila, M. Froesch, J. Peter-Katalinić  
1<sup>st</sup> Croatian Neuroscience Meeting, Zagreb, Croatia, Nov. 21-22, 2003  
POSTER PRESENTATION
44. Glycomics of Glycosaminoglycans  
**A.D. Zamfir**, D. Seidler, H. Kresse, M. Mormann, J. Peter-Katalinić  
8<sup>th</sup> Conference of the American Society of Glycobiology, San Diego, CA, USA, 3-6, 2003  
POSTER PRESENTATION
45. Negative Ion NanoESI FTICR MS of Glycosphingolipids  
L. Bindila, M. Froesch, **A.D. Zamfir**, S. Usuki, Ž. Vukelić, R. K. Yu, J. Peter-Katalinić  
German Society for Mass Spectrometry Conference, Leipzig, Germany, 7-10 March, 2004  
POSTER PRESENTATION
46. Microheterogeneity of N-Glycoforms in Bovine Serum Transferrin



- J. Milosevic, P. Rehulka, L. Bindila, **A.D. Zamfir**, J. Peter-Katalinić  
 German Society for Mass Spectrometry Conference, Leipzig, Germany, 7-10 March, 2004  
 POSTER PRESENTATION
47. Implementation of Fully Automated Chip-Based NanoElectrospray Mass Spectrometry in Glycomics  
**A.D. Zamfir**, A. Sterling, R. Almeida, M. Allen, J. Peter-Katalinić  
 German Society for Mass Spectrometry Conference, Leipzig, Germany, 7-10 March, 2004  
 ORAL PRESENTATION
48. Ionization and Fragmentation of Highly Sialylated Glycosphingolipids by FTICR MS  
 M. Froesch, L. Bindila, Ž. Vukelić, **A.D. Zamfir**, J. Peter-Katalinić  
 7<sup>th</sup> European FTMS Conference, Konstanz, Germany, Conference, 28 March-01 April, 2004  
 POSTER PRESENTATION
49. FTICR of Glycoconjugates  
 M. Mormann, M. Froesch, L. Bindila, Ž. Vukelić, **A.D. Zamfir**, J. Peter-Katalinić  
 7<sup>th</sup> European FTMS Conference, Konstanz, Germany, 28 March-01 April, 2004  
 POSTER PRESENTATION
50. Fully Automated Chip-Based NanoElectrospray Tandem Mass Spectrometry: A Novel Concept in Glycomics  
**A.D. Zamfir**, R. Almeida, A. Sterling, M. Allen, J. Henion, J. Peter-Katalinić  
 Proc. of the 52<sup>nd</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, Nashville, Tennessee, USA, 23-28 May, 2004  
 KEYNOTE LECTURE
51. Off-line Capillary Electrophoresis/Fully Automated Chip NanoESI QTOF MS for Glycoconjugate Analysis  
 R. Almeida, L. Bindila, **A.D. Zamfir**, A. Sterling, M. Allen, J. Peter-Katalinić  
 Proc. of the 52<sup>nd</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, Nashville, Tennessee, USA, 23-28 May, 2004  
 POSTER PRESENTATION
52. FTICR MS of Sialylated Gangliosides from Human Brain Biopsies  
 M. Froesch, Ž. Vukelić, L. Bindila, **A.D. Zamfir**, J. Peter-Katalinić  
 Proc. of the 52<sup>nd</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, Nashville, Tennessee, USA, 23-28 May, 2004  
 POSTER PRESENTATION
53. Structural and Quantitative Analysis of Gangliosides from Gliosarcoma and Meningioma  
 S. Kalanj-Bognar, Ž. Vukelić, **A.D. Zamfir**, L. Bindila, M. Froesch, J. Peter-Katalinić  
 Congress of the Croatian Society for Biochemistry and Molecular Biology, Bjelolasica, Croatia, September 30-October 2, 2004  
 POSTER PRESENTATION
54. Novel Trends in *N*- and *O*-Glycoproteomics  
 J. Peter-Katalinić, L. Bindila, M. Froesch, M. Mormann, D. Šagi, S. Vakhrushev, **A.D. Zamfir**  
 3<sup>rd</sup> Swedish Proteomics Society Symposium, Lund, October 2-5, 2004  
 ORAL PRESENTATION
55. Fully-Automated chip-Based Nanoelectrospray Tandem Mass Spectrometry of Gangliosides from Human Cerebellum  
**A.D. Zamfir**, L. Bindila, R. Almeida, A. Sterling, Ž. Vukelić, M. Allen, J. Peter-Katalinić  
 Advion User Meeting, 21<sup>th</sup> LC/MS Montreux Symposium, Montreux, Switzerland, November 10-12, 2004  
 INVITED LECTURE
56. Implementation of Chip Electrospray Mass Spectrometry in Structural Glycobiology  
 M. Froesch, L. Bindila, Ž. Vukelić, J. Peter-Katalinić, **A.D. Zamfir**  
 15<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Biochemie und Molekularbiologie“, the „Nederlandse Vereininging voor Glycobiologie“ and the „Groupe Lillois de Glycobiologie“, Wageningen, Niederlande, November 29-30, 2004,  
 Glycoconjugate J. 21, 398, 2004  
 POSTER PRESENTATION
57. Coupling of Fully Automated ChipESI to FT-ICR Mass Spectrometry for High-Performance Glycoscreening and Sequencing  
 M. Froesch, L. Bindila, G. Baykut, M. Allen, J. Peter-Katalinić, **A.D. Zamfir**  
 15<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Biochemie und Molekularbiologie“, the „Nederlandse Vereininging voor Glycobiologie“ and the „Groupe Lillois de Glycobiologie“, Wageningen, Niederlande, November 29-30, 2004,  
 Glycoconjugate J. 21, 404, 2004  
 POSTER PRESENTATION

58. Thin Polymer Chip Coupled to Fourier Transform Ion Cyclotron Resonance Mass Spectrometry for Glycopeptide Screening  
L. Bindila, M. Froesch, N. Lion, J. S. Rossier, H. H. Girault, **A.D. Zamfir**, J. Peter-Katalinić  
15<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Biochemie und Molekularbiologie“, the „Nederlandse Vereininging voor Glycobiologie“ and the „Groupe Lillois de Glycobiologie“, Wageningen, Niederlande, November 29-30, 2004, Glycoconjugate J. 21, 400, 2004  
POSTER PRESENTATION
59. Thin chip polymer microsyringes for glycoconjugate analysis of Schindler disease patients  
N. Lion, L. Bindila, M. Froesch, Ž. Vukelić, J. S. Rossier, H. H. Girault, J. Peter-Katalinić, **A.D. Zamfir**  
Jahrestagung der Schweizerischen Proteomgesellschaft, SPS'04 Inselspital Bern, Switzerland, December 6-8, 2004  
POSTER PRESENTATION
60. Chip-Based Ionization Mass Spectrometry for Glycoscreening in Biomedical Research  
**A.D. Zamfir**, Ž. Vukelić, L. Bindila, M. Froesch, J. Peter-Katalinić  
18th International Symposium on Microscale Bioseparations, New Orleans, LA, USA, February 12-17, 2005  
ORAL PRESENTATION
61. Determination of ganglioside expression in human gliosarcoma by chip electrospray tandemmass spectrometry  
**A.D. Zamfir**, L. Bindila, Ž. Vukelić, J. Peter-Katalinić  
German Society for Mass Spectrometry Conference, Rostock, Germany, 6-9 March, 2005  
POSTER PRESENTATION
62. High-performance glycoscreening and sequencing by chip-enhanced ESI-FTICR spectrometry  
M. Froesch, L. Bindila, G. Baykut, N. Lion, H. Girault, M. Allen, J. Peter-Katalinić, **A.D. Zamfir**  
German Society for Mass Spectrometry Conference, Rostock, Germany, 6-9 March, 2005  
POSTER PRESENTATION
63. On-line reverse polarity capillary electrophoresis coupled to electrospray quadrupole time-of-flight mass spectrometry for analysis of glycopeptides from Schindler's disease  
L. Bindila, J. Peter-Katalinić, **A.D. Zamfir**  
German Society for Mass Spectrometry Conference, Rostock, Germany, 6-9 March, 2005  
POSTER PRESENTATION
64. FTICR mass spectrometry for glycoconjugate analysis  
**A.D. Zamfir**  
Invited lecture, GSF, München, May 10, 2005
65. Challenges in mass spectrometry-based glycomics  
**A.D. Zamfir**  
Invited lecture, University of Konstanz, September 13, 2005
66. Implementation of microfluidics/electrospray mass spectrometry in glycolipidomics: determination of ganglioside expression in human brain tumors  
**A.D. Zamfir**, Ž. Vukelić, S. Kalanj-Bognar, J. Peter-Katalinić  
Proc. of the 53<sup>rd</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, San Antonio, Texas, USA, 5-9 June, 2005  
POSTER PRESENTATION
67. Biomarker discovery in human gliosarcoma by fully automated chip-based mass spectrometry  
R. Almeida, Ž. Vukelić, L. Bindila, S. Kalanj-Bognar, J. Peter-Katalinić, **A.D. Zamfir**  
LC/MS symposium, Ithaca, USA, July 20-22, 2005  
ORAL PRESENTATION
68. Determination of ganglioside pattern in human hippocampus by fully automated chip-based nanoelectrospray mass spectrometry  
M. Zarei, Ž. Vukelić, J. Peter-Katalinić, **A.D. Zamfir**  
16<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Glycobiologie“, Hannover, Germany, October, 27-29, 2005  
POSTER PRESENTATION
69. Structural analysis of sulfated and O-acetylated glycopeptides in urine of Schindler disease patients by on-line capillary electrophoresis/mass spectrometry  
L. Bindila, **A.D. Zamfir**, J. Peter-Katalinić  
16<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Biochemie und Molekularbiologie“, the „Nederlandse Vereininging voor Glycobiologie“ and the „Groupe Lillois de Glycobiologie“, Hannover, Germany, October, 27-29, 2005  
POSTER PRESENTATION

70. Capillary electrophoresis and chip-based mass spectrometry  
**A.D. Zamfir**  
 Chemistry Institute of Romanian Academy, Timișoara, Romania, 15.12.2005  
 Invited lecture
71. Lab-on-a-chip: a new perspective in analytical and instrumental chemistry  
**A.D. Zamfir**  
 Chemistry Institute of Romanian Academy, Timișoara, Romania, 22.12.2005  
 Invited lecture
72. Analysis of human hippocampus gangliosides by fully-automated chip-base nanoelectrospray tandem mass spectrometry  
**A.D. Zamfir**, M. Zarei, Ž. Vukelić, J. Peter-Katalinić  
 19<sup>th</sup> International Symposium on Microscale Bioseparations, Amsterdam, Netherlands, January 22-26, 2006  
 POSTER PRESENTATION
73. Implementation of microfluidic chip MS in glycolipidomics. Application to biomarker discovery  
**A.D. Zamfir**, J. Peter-Katalinić  
 19<sup>th</sup> International Symposium on Microscale Bioseparations, Amsterdam, Netherlands, January 22-26, 2006  
 Invited lecture
74. Multimethodological mass spectrometry approach for compositional and structural analysis of human brain gangliosides  
 M. Zarei, S. Vakhrushev, Ž. Vukelić, A. Schneider, A. Ingendoh, J. Peter-Katalinić, **A.D. Zamfir**  
 German Society for Mass Spectrometry Conference, Mainz, Germany, 5-9 March, 2006  
 POSTER PRESENTATION
75. Human gliosarcoma-associated gangliosides: a high performance mass spectrometric determination  
 Ž. Vukelić, S. Kalanj-Bognar, E. Sisu, I. Grozescu, **A.D. Zamfir**  
 International Conference on Perspectives in Central Nervous System Malignancies, Budapest, April, 7-8, 2006  
 POSTER PRESENTATION
76. Fully automated chip-based nanoelectrospray tandem mass spectrometry for the determination of noncovalent protein-carbohydrate interaction  
**A.D. Zamfir**, M. Peter, J. Peter-Katalinić  
 Proc. of the 52<sup>nd</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, Seattle, Washington, USA, 27-30 May, 2006  
 ORAL PRESENTATION
77. Human glioblastoma gangliosides-mass spectrometry investigation  
**A.D. Zamfir**  
 International Conference on Neuronal Excitability, Bucharest, Romania, Sept. 1-3, 2006  
 INVITED LECTURE
78. Fully automated chip-based electrospray mass spectrometry-a novel concept in glycomics for biomedical research  
**A.D. Zamfir**, E. Sisu, Ž. Vukelić, C. Flangea, I. Grozescu, J. Henion, J Peter-Katalinić  
 International NanoBioSpec Conference, Cluj-Napoca, September 3-6, 2006  
 ORAL PRESENTATION
79. High performance electrospray and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry of modified maltodextrins and dextrans  
 E. Sisu, I. Sisu, I. Scurtu, N. Dinca, A. Serb, C. Neanu, J. Peter-Katalinić, **A.D. Zamfir**  
 International NanoBioSpec. Conference, Cluj-Napoca, September 3-6, 2006  
 POSTER PRESENTATION
80. Identification of a high-affinity binding oligosaccharide by (+) nanoelectrospray quadrupole time-of-flight mass spectrometry of a non-covalent enzyme-ligand complex  
 F. H. Cederkvist, **A.D. Zamfir**, S. Bahrke, V.G.H. Eijssink, M. Sørlie, J. Peter-Katalinić, M.G. Peter  
 7<sup>th</sup> European Chitin Society Conference, Montpellier, France, Sept. 6-9, 2006  
 ORAL PRESENTATION
81. Determination of ganglioside pattern in human hippocampus by chip-based nanoelectrospray ionization tandem mass spectrometry  
 Ž. Vukelić, M. Zarei, J. Peter-Katalinić, **A.D. Zamfir**  
 International Conference of the Croatian Biochemical Society, Vodice, Croatia, October 4-9, 2006  
 POSTER PRESENTATION
82. Chip electrospray mass spectrometry for glycoscreening in biomedical research

- A.D. Zamfir**  
International Conference of the Croatian Biochemical Society, Vodice, Croatia, October 4-9, 2006  
ORAL PRESENTATION
83. Glycomics and systems biology: new targets for microfluidics-mass spectrometry  
**A.D. Zamfir**  
International Conference Research and Education in Innovation Era, Arad, Romania, November 9-12, 2006  
ORAL PRESENTATION
84. High capacity ion trap multiple stage sequencing of human brain gangliosides  
Ž. Vukelić, C. Ratiu, A. Serb, C. Flangea, E. Sisu, I. Grozescu, **A.D. Zamfir**  
International Conference Research and Education in Innovation Era, Arad, Romania, November 9-12, 2006  
POSTER PRESENTATION
85. Novel mass spectrometric strategies for determination of protein O- and N- glycosylation  
**A.D. Zamfir**  
University of Konstanz, Germany, November 21, 2006  
INVITED LECTURE
86. Mass spectrometry of carbohydrates  
**A.D. Zamfir**  
University of Konstanz, Germany, November 23, 2006  
INVITED LECTURE
87. A novel method for structural analysis of human brain gangliosides based on nano-electrospray multiple stage sequencing mass spectrometry  
**A.D. Zamfir**, Ž. Vukelić, A. Schneider, E. Sisu, A. Ingendoh  
Vienna MS Forum, Vienna, Austria, February 19-22, 2007  
INVITED LECTURE
88. Structural analysis of human decorin dermatan sulfate by nano-electrospray ionization quadrupole time-of-flight tandem mass spectrometry  
F. Harja, C. Flangea, D.G. Seidler, N. Dinca, E. Sisu, **A.D. Zamfir**  
German Society for Mass Spectrometry Conference, Bremen, Germany, 11-14 March, 2007  
POSTER PRESENTATION
89. Mapping and sequencing of gangliosides from defined regions of human brain by nano-electrospray ionization quadrupole time-of-flight tandem mass spectrometry  
A. Serb, F. Harja, Ž. Vukelić, N. Dinca, E. Sisu, **A.D. Zamfir**  
German Society for Mass Spectrometry Conference, Bremen, Germany, 11-14 March, 2007  
POSTER PRESENTATION
90. Electrospray ionization mass spectrometry: principles and biomedical applications  
**A.D. Zamfir**  
Institute for Physiological Chemistry, May, 19, 2007, Muenster, Germania  
INVITED LECTURE
91. Structural analysis of chondroitin/dermatan sulfate glycosaminoglycans from human decorin by electrospray ionization multiple stage mass spectrometry  
D.G. Seidler, C. Flangea, A. Schneider, A. Serb, E. Sisu, A. Ingendoh, **A.D. Zamfir**  
54<sup>th</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, June 2-7, 2007, Indianapolis, Indiana, USA  
ORAL PRESENTATION
92. Electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry of long chain polysaccharides  
I. Perdivara, E. Sisu, I. Sisu, M. Przybylski, **A.D. Zamfir**  
54<sup>th</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, June 2-7, 2007, Indianapolis, Indiana, USA  
POSTER PRESENTATION
93. Principles and applications of electrospray ionization mass spectrometry  
**A.D. Zamfir**  
1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
INVITED LECTURE

94. Applications of fully automated chip-based electrospray in biological mass spectrometry  
**A.D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 INVITED TUTORIAL LECTURE
95. NanoESI QTOF and MALDI TOF MS of modified maltodextrins and dextrans  
 V. Udrescu, Ioana Sisu, N. Dinca, A. Lascu, C.Neanu E. Sisu, L. Rusnac, **A. D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
96. Mapping and sequencing of gangliosides from anencephaly by electrospray ionization high capacity ion trap mass spectrometry  
 C. Mosoarca, Ž. Vukelić, **A.D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
97. Determination of decorin glycosaminoglycan oversulfation by electrospray ionization quadrupole time-of-flight tandem mass spectrometry  
 C. Flangea, A.F. Serb, E. Sisu, N. Dinca, **A.D. Zamfir**, D.G. Seidler  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
98. Compositional and structural analysis of long chain polysaccharides by electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry  
 I. Perdivara, E. Sisu, I. Sisu, M. Przybylski, K. B. Tomer, **A.D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
99. Comparative study upon ganglioside pattern in defined regions of human cerebrum using nanoelectrospray ionization quadrupole time-of-flight mass spectrometry  
 A.F. Serb, C. Flangea, N. Dinca, E. Sisu, F. Harja, **A.D. Zamfir**, Ž. Vukelić  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
100. Mass spectrometric determination of ganglioside expression and structure in human neocortex  
 M.I. Chirita, A.F. Serb, E. Sisu, Ž. Vukelić, **A.D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
101. Microspray high capacity ion trap multiple stage mass spectrometry of polysaccharides functionalized with aromatic amines  
 I. Sisu, E. Sisu, N. Dinca, V. Rusu, **A.D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 ORAL PRESENTATION
102. Structural analysis of chondroitin/dermatan sulfate disaccharides by electrospray ionization high capacity ion trap mass spectrometry  
 A. Muresan, M. Galusca, D.G. Seidler, N. Dinca, **A.D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
103. A novel approach for investigation of unusual sulfation motifs in chondroitin/dermatan sulfate from a specific proteoglycan by multiple stage mass spectrometry  
**A.D. Zamfir**, E. Sisu, C. Flangea, A.F. Serb, N. Dinca, P. Bruckner, D.G. Seidler  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
104. Electrospray ionization mass spectrometry of novel o-hydroxy-benzamide derivatives

- M.C. Ienascu, C. Mosoarca, I. M. Popescu, A. X. Lupea, **A.D. Zamfir**  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
105. Electrospray ionization tandem mass spectrometric investigation of *Melissa officinalis* oil  
 D. Tibeana, F. Vata, M. Chirita, I.B. Pancan, **A.D. Zamfir**, C.C. Toma  
 1<sup>st</sup> Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety under NATO auspices, Sept. 23-27, 2007, Herculane, Romania  
 POSTER PRESENTATION
106. Determination of unusual sulfation motifs in chondroitin/dermatan sulfate from a specific proteoglycan by multiple stage mass spectrometry  
 D.G. Seidler, E. Sisu, C. Flangea, A. F. Serb, N. Dinca, P. Bruckner, **A.D. Zamfir**  
 18<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Biochemie und Molekularbiologie“, the „Nederlandse Vereniging voor Glycobiologie“ and the „Groupe Lillois de Glycobiologie“, Nov. 5-8, 2007, Lille, France  
 POSTER PRESENTATION
107. Determination of ganglioside expression and structure in human neocortex by electrospray ionization multiple stage mass spectrometry  
 M. I. Chirita, Ž. Vukelić, **A.D. Zamfir**  
 18<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Biochemie und Molekularbiologie“, the „Nederlandse Vereniging voor Glycobiologie“ and the „Groupe Lillois de Glycobiologie“, Nov. 5-8, 2007, Lille, France  
 POSTER PRESENTATION
108. Survey upon ganglioside expression in anencephaly vs. normal fetal brain by electrospray ionization multiple stage mass spectrometry  
 C. Mosoarca, Ž. Vukelić, **A.D. Zamfir**  
 18<sup>th</sup> Joint Meeting of the „Studiengruppe Glykobiologie der Gesellschaft für Biochemie und Molekularbiologie“, the „Nederlandse Vereniging voor Glycobiologie“ and the „Groupe Lillois de Glycobiologie“, Nov. 5-8, 2007, Lille, France  
 POSTER PRESENTATION
109. Fully automated chip-based electrospray ionization multistage CID/ETD mass spectrometry for glycoconjugate analysis  
**A.D. Zamfir**, V. Udrescu, R. Almeida, F. Harja, N. Dinca, L. Rusnac, M. Allen  
 Austrian Mass Spectrometry Forum, Feb. 18-22, 2008, Vienna, Austria  
 Invited lecture
110. Glycomics of brain glycosaminoglycans by chip ESI MS<sup>n</sup>  
 C. Flangea, C. Mosoarca, A.F. Serb, E. Sisu, D.G. Seidler, **A.D. Zamfir**  
 Germany Society for Mass Spectrometry Conference, DGMS, March 3-6, 2008, Giessen, Germany  
 POSTER PRESENTATION
111. High throughput brain ganglioside mapping and multistage sequencing by fully automated chip-based nanoelectrospray high capacity ion trap mass spectrometry  
 A.F. Serb, C. Mosoarca, C. Flangea, E. Sisu, Ž. Vukelić, **A.D. Zamfir**  
 Germany Society for Mass Spectrometry Conference, DGMS, March 3-6, 2008, Giessen, Germany  
 POSTER PRESENTATION
112. Novel mass spectrometric methods and protocols for protein glycosylation analysis  
**A.D. Zamfir**  
 April 28-May 5, 2008, Konstanz, Germany  
 INVITED LECTURE
113. Fully automated chip-based electrospray ionization multistage mass spectrometry of long chain polysaccharides functionalized with aromatic amines  
 V. Udrescu, E. Sisu, I. Sisu, L. Rusnac, M. Allen, R. Almeida, **A.D. Zamfir**  
 56<sup>th</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, June 1-6, 2008, Denver, Colorado, USA  
 ORAL PRESENTATION
114. Coupling of fully automated chip-based electrospray ionization to high capacity ion trap mass spectrometer for high throughput ganglioside analysis  
 C. Mosoarca, M. Chirita, R. Almeida, M. Allen, M. Allen, **A.D. Zamfir**  
 56<sup>th</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, June 1-6, 2008, Denver, Colorado, USA  
 POSTER PRESENTATION

115. Coupling of NanoMate Robot to High Capacity Ion Trap Mass Spectrometer for Glycoconjugate Analysis  
M. Chirita, A. Serb, E. Sisu, Ž. Vukelić, **A.D. Zamfir**  
Conferinta Internationala de Chimie, 29-31 Mai 2008, Timișoara, Romania  
POSTER PRESENTATION
116. Mass Spectrometric Mapping and Sequencing of Gangliosides Expressed in Normal Adult Human Cerebellum  
A. Ienin, E. Șișu, Ž. Vukelić, **A.D. Zamfir**  
Conferinta Internationala de Chimie, 29-31 Mai 2008, Timișoara, Romania  
POSTER PRESENTATION
117. Investigation of volatile oil extracted from *Melissa officinalis* by electrospray ionization tandem mass spectrometry  
C.C. Toma, I. B. Pancan, M. Chirita, **A.D. Zamfir**  
Conferinta Internationala de Chimie, 29-31 Mai 2008, Timișoara, Romania  
POSTER PRESENTATION
118. Identification of sulfation pattern in mouse brain glycosaminoglycans by high performance electrospray ionization mass spectrometry  
C. Flangea, C. Mosoarca, A. F. Serb, E. Sisu, D.G. Seidler, **A.D. Zamfir**  
Conferinta Internationala de Chimie, 29-31 Mai 2008, Timișoara, Romania  
POSTER PRESENTATION
119. Synthesis and characterization of maltodextrins modified with aromatic amines  
I. Sisu, E. Sisu, **A.D. Zamfir**  
Conferinta Internationala de Chimie, 29-31 Mai 2008, Timișoara, Romania  
ORAL PRESENTATION
120. A novel method to enhance mass spectrometric analysis of long chain polysaccharides  
V. Udrescu, L. Rusnac, I. Sisu, E. Sisu, R. Almeida, **A.D. Zamfir**  
Conferinta Internationala de Chimie, 29-31 Mai 2008, Timișoara, Romania  
POSTER PRESENTATION
121. Determination and structural characterization of anencephaly-associated gangliosides by advanced mass spectrometry based on chip electrospray ionization and multistage sequencing.  
**A.D. Zamfir**, C. Mosoarca, C. Flangea, Ž. Vukelić, E. Sisu  
6<sup>th</sup> FENS Forum of European Neuroscience Societies, July 12-18 2008, Geneva, Switzerland; vol.4, 083.29, 2008  
POSTER PRESENTATION
122. Comparative assay on ganglioside differential expression in defined regions of human brain by modern mass spectrometric methods  
A.F. Serb, C. Flangea, Ž. Vukelić, E. Sisu, L. Zăgrean, **A.D. Zamfir**  
6<sup>th</sup> FENS Forum of European Neuroscience Societies, July 12-18 2008, Geneva, Switzerland, vol.4, 075.11, 2008  
POSTER PRESENTATION
123. Glycomics of human fetal brain gangliosides by chip electrospray ionization multistage mass spectrometry  
**A.D. Zamfir**  
24<sup>th</sup> International Carbohydrate Symposium July 27 - August 1 2008, Oslo, Norway  
Invited lecture
124. Analysis of oversulfation in a dermatan sulfate octasaccharide from human skin fibroblast decorin by nanoelectrospray ionization quadrupole time-of-flight tandem mass spectrometry  
C. Flangea, A. Serb, F. Harja, D.G. Seidler, N. Dinca, E. Sisu, **A.D. Zamfir**  
5<sup>th</sup> International Conference on Condensed Matter Physics, July 16-18, 2008, Timișoara, Romania  
POSTER PRESENTATION
125. High performance mass spectrometric investigation of glycosphingolipid differential expression in human brain  
A.F. Serb, C. Flangea, F. Harja, I. Sisu, Z. Szabadai, N. Dinca, E. Sisu, **A.D. Zamfir**  
5<sup>th</sup> International Conference on Condensed Matter Physics, July 16-18, 2008, Timișoara, Romania  
POSTER PRESENTATION
126. Lab-on-a chip: a novel concept in glycomics  
**A.D. Zamfir**  
5<sup>th</sup> International Conference on Condensed Matter Physics, July 16-18, 2008, Timișoara, Romania  
ORAL PRESENTATION
127. NanoMate/HCT MS o noua tehnica pentru analiza carbohidratilor cu aplicatii in biomedicina

**A.D. Zamfir**, V. Udrescu, C. Flangea, E. Sisu, N. Dinca, L. Rusnac  
Simpozionul National al Academiei de Stiinte Medicale din Romania, 28-30 Sept. 2008, Sinaia, Romania  
ORAL PRESENTATION

128. Compositional and structural determination of brain gangliosides from mass spectrometric data by software-assisted assignment  
C. Schiopu, E. Sisu, Ž. Vukelić, **A.D. Zamfir**  
Neuroscience Workshop-Conferinta Internationala ANCS: Diaspora in Cercetarea Stiintifica Romaneasca, 17-19 Sept. 2008, București, Romania  
ORAL PRESENTATION
129. Fetal brain glycolipids exhibit filogenetic and topologic specificity as revealed by fully automated chip-electrospray multistage ion trap mass spectrometry  
A. Serb, E. Sisu, Ž. Vukelić, L. Zăgrean, **A.D. Zamfir**  
Neuroscience Workshop-Conferinta Internationala ANCS: Diaspora in Cercetarea Stiintifica Romaneasca, 17-19 Sept. 2008, București, Romania  
ORAL PRESENTATION
130. Profiling of gangliosides expressed in human hemangioma by fully-automated chip-based nanoelectrospray tandem mass spectrometry  
A. Serb, C. Schiopu, C. Flangea, E. Sisu, S. Tudor, Ž. Vukelić, **A.D. Zamfir**  
2<sup>nd</sup> International Symposium Research and Education in Innovation Era, 20-21 Nov., 2008, Arad, Romania  
ORAL PRESENTATION
131. Identification of sialylated and sulfated glycosphingolipids by Fourier transform ion cyclotron resonance mass spectrometry  
**A.D. Zamfir**, Ž. Vukelić  
2<sup>nd</sup> International Symposium Research and Education in Innovation Era, 20-21 Nov., 2008, Arad, Romania  
ORAL PRESENTATION
132. Investigation of unusual sulfation motifs in chondroitin/dermatan sulfate from a specific proteoglycan by multistage mass spectrometry  
**A.D. Zamfir**, D.G. Seidler  
2<sup>nd</sup> International Symposium Research and Education in Innovation Era, 20-21 Nov., 2008, Arad, Romania  
ORAL PRESENTATION
133. Computer software for interpretation of brain ganglioside mass spectra  
C. Schiopu, E. Sisu, S. Nadaban, C. Fifor, Ž. Vukelić, **A.D. Zamfir**  
2<sup>nd</sup> International Symposium Research and Education in Innovation Era, 20-21 Nov., 2008, Arad, Romania  
POSTER PRESENTATION
134. Investigation of glycosaminoglycan sulfation pattern by high performance chip electrospray multistage mass spectrometry  
C. Flangea, A. Serb, F.Harja, S. Tudor, I. Pancan, E. Sisu, D.G. Seidler, **A.D. Zamfir**  
2<sup>nd</sup> International Symposium Research and Education in Innovation Era, 20-21 Nov., 2008, Arad, Romania  
ORAL PRESENTATION
135. A novel procedure for derivatization of long chain polysaccharides to enhance fully automated chip-based nanoelectrospray multistage mass spectrometric analysis  
E. Sisu, I. Sisu, C. Flangea, V. Udrescu, N. Dinca, **A.D. Zamfir**  
2<sup>nd</sup> International Symposium Research and Education in Innovation Era, 20-21 Nov., 2008, Arad, Romania  
POSTER PRESENTATION
136. Analiza polizaharidelor de tip condroitin/dermatan sulfat din creier prin spectrometrie de masa.  
C. Flangea, A.F.Serb, E. Sisu, **A.D. Zamfir**  
Simpozion National VIASAN-CEEX (Modul 1) 28-30 septembrie 2008, Sinaia, pg 48  
POSTER PRESENTATION
137. Nanomate/HCT MS o noua tehnica pentru analiza carbohidratilor cu aplicatii in biomedicina.  
V. Udrescu, C. Flangea, E. Sisu, N. Dinca, L. Rusnac, **A.D. Zamfir**.  
Simpozion National VIASAN-CEEX (Modul 1) 28-30 septembrie 2008, Sinaia, pg 48  
ORAL PRESENTATION
138. Identification of a novel glycosaminoglycan sequence in human decorin by electrospray ionization multistage ion trap mass spectrometry  
**A.D. Zamfir**, E. Sisu, C. Flangea, A. Serb, D.G. Seidler  
2<sup>nd</sup> International Symposium Research and Education in Innovation Era, 20-21 Nov., 2008, Arad, Romania



ORAL PRESENTATION

139. Potentials of a fully automated chip-based nanoelectrospray ionization high capacity trap mass spectrometry in neuroglycolipidomics: characterization of ganglioside composition specificity in selected fetal human brain regions  
Ž. Vukelić, D. Marinčić, A. Serb, **A.D. Zamfir**

Austrian Mass Spectrometry Forum, Feb. 17-19, 2009, Vienna, Austria  
INVITED LECTURE

140. Novel saccharide sequence analysis of glycosaminoglycans by enzyme cleavage and multistage MS: unusual exuronic acid sulfation in decorin

C. Flangea, C. Schiopu, E. Sisu, N. Dinca, D.G. Seidler, **A.D. Zamfir**

Austrian Mass Spectrometry Forum, Feb. 17-19, 2009, Vienna, Austria

ORAL PRESENTATION

141. A new Mass Spectrometry Society – Perspectives and plans

**A.D. Zamfir**

Anniversary Conference, 20 years of Analytical Chemistry in Konstanz, March 5-7, 2009, Konstanz, Germany

INVITED LECTURE

142. Chip-based nanoelectrospray multistage mass spectrometry in neuroglycolipidomics: high-throughput analysis of gangliosides in defined regions of fetal brain

A.F. Serb, C. Schiopu, D. Marinčić, Ž. Vukelić, **A.D. Zamfir**

42<sup>nd</sup> German Society for Mass Spectrometry Conference, Konstanz, Germany, March 8-11, 2009

ORAL PRESENTATION

143. Investigation of novel under- and over-sulfated regions in decorin glycosaminoglycans by electrospray ionization collision-induced dissociation multistage mass spectrometry

C. Flangea, E. Sisu, N. Dinca, D.G. Seidler, **A.D. Zamfir**

42<sup>nd</sup> German Society for Mass Spectrometry Conference, Konstanz, Germany, March 8-11, 2009

POSTER PRESENTATION

144. A novel procedure for derivatization of long chain polysaccharides to enhance chip-based nanoelectrospray tandem mass spectrometric analysis

C. Flangea, I. Sisu, N. Dinca, E. Sisu, **A.D. Zamfir**

42<sup>nd</sup> German Society for Mass Spectrometry Conference, Konstanz, Germany, March 8-11, 2009

POSTER PRESENTATION

145. Chip-Based nanoelectrospray high capacity ion trap mass spectrometry of gangliosides from precentral vs. postcentral gyrus of fetal human brain

D. Marinčić, Ž. Vukelić, C. Schiopu, M. Kos, **A.D. Zamfir**

42<sup>nd</sup> German Society for Mass Spectrometry Conference, Konstanz, Germany, March 8-11, 2009

POSTER PRESENTATION

146. Screening and sequencing of fructooligosaccharides produced by heterologously expressed levansucrase from *Pseudomonas syringae* pv. tomato DC3000 by fully automated chip based mass spectrometry

C. Mosoarca, T. Visnapuu, T. Alamäe, **A.D. Zamfir**

42<sup>nd</sup> German Society for Mass Spectrometry Conference, Konstanz, Germany, March 8-11, 2009

POSTER PRESENTATION

147. High-throughput mass spectrometric determination of ganglioside expression and structure in human fetal cerebellum

R. M. Ghiulai, C. Mosoarca, C. Novaconi, D. Marinčić, Ž. Vukelić, **A.D. Zamfir**

42<sup>nd</sup> German Society for Mass Spectrometry Conference, Konstanz, Germany, March 8-11, 2009

POSTER PRESENTATION

148. Chip-based mass spectrometry for glycomics and glycoproteomics

**A.D. Zamfir**

Invited lecture: Anniversary Symposium "20 years of Analytical Chemistry at University of Konstanz", Konstanz, May 12-13, 2009

149. Analysis of brain chondroitin/dermatan sulfate glycosaminoglycans by fully automated chip-based nanoelectrospray multistage mass spectrometry

C. Flangea, E. Sisu, D.G. Seidler, **A.D. Zamfir**

57<sup>th</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, May 31-June 6, 2009, Philadelphia, USA

POSTER PRESENTATION

150. Compositional and structural analysis of gangliosides in human cerebrospinal fluid by chip-based nanoelectrospray ionization tandem mass spectrometry

A. Serb, C. Schiopu, D. Marinčić, Ž. Vukelić, **A.D. Zamfir**

57<sup>th</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, May 31-June 6, 2009, Philadelphia, USA

POSTER PRESENTATION

151. Combining fully-automated chip-nanoelectrospray ion trap mass spectrometry and GanglioSoft 1.2 computer software for identification of human hemangioma gangliosides

C. Schiopu, A. Serb, E. Sisu, Ž. Vukelić, **A.D. Zamfir**

57<sup>th</sup> American Society for Mass Spectrometry Conference on Mass Spectrometry and Allied Topics, May 31-June 6, 2009, Philadelphia, USA

POSTER PRESENTATION

152. A novel method for brain ganglioside analysis based on top-down fragmentation by multistage mass spectrometry.

A. Serb, C. Schiopu, C. Flangea, A.M. Zagrean, E. Sisu, **A. D. Zamfir**, L. Zagrean.

5<sup>th</sup> "Gheorghe Marinescu" Symposium of the National Neuroscience Society of Romania (with international participation). "Carol Davila" University of Medicine and

Pharmacy, October 1-3 2009, Bucharest, Romania

ORAL PRESENTATION

153. Automatic assignment of ganglioside mass spectrometry using a novel computer software platform

C. Schiopu, F. Capitan, A. Serb, A.M. Zagrean, C. Flangea, E. Sisu, L. Zagrean, **A.D. Zamfir**

5<sup>th</sup> "Gheorghe Marinescu" Symposium of the National Neuroscience Society of Romania (with international participation). "Carol Davila" University of Medicine and

Pharmacy, October 1-3 2009, Bucharest, Romania

ORAL PRESENTATION

154. Biomarker discovery in human brain hemangioma by fully automated chipbased nanoelectrospray mass spectrometry. F. Capitan, C. Schiopu, A.

Serb, A.M. Zagrean, C. Flangea, E. Sisu, L. Zagrean, A. d. Zamfir

5<sup>th</sup> "Gheorghe Marinescu" Symposium of the National Neuroscience Society of Romania (with international participation). "Carol Davila" University of

Medicine and Pharmacy, October 1-3 2009, Bucharest, Romania

ORAL PRESENTATION

155. Structural analysis of chondroitin/dermatan sulfate oligosaccharides from biglycan by fully automated chip-nanoelectrospray ion trap mass spectrometry.

Flangea, Corina; Sisu, Eugen; Seidler, Daniela; **A.D. Zamfir**

43. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie 7-10 March 2010 Halle/Saale Germany

ORAL PRESENTATION

156. High throughput sequencing of polysialylated gangliosides by chip nanoelectrospray multistage collision-induced dissociation.

Schiopu, Catalin; Serb, Alina; Flangea, Corina; Sisu, Eugen; **A.D. Zamfir**

43. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie 7-10

March 2010 Halle/Saale Germany

POSTER PRESENTATION

157. Glycomics Of Glycosaminoglycans By Chip-Nanoelectrospray Mass Spectrometry.

Corina Flangea, Eugen Sisu, Daniela Seidler, **A.D. Zamfir**

1<sup>st</sup> Romanian Society for Mass Spectrometry Conference

"Introducing Life Science Mass Spectrometry in Romania" April 25-29

2010 Sinaia, Romania

POSTER PRESENTATION

158. Chip-Based Nanoelectrospray Ionization Mass Spectrometry Of Biglycan Chondroitin/Dermatan Sulfate Oligosaccharides.

Corina Flangea, Ramona Aldea, Eugen Sisu, Daniela Seidler, **A.D. Zamfir**

1<sup>st</sup> Romanian Society for Mass Spectrometry Conference "Introducing Life

Science Mass Spectrometry in Romania" April 25-29 2010 Sinaia,

Romania

ORAL PRESENTATION

159. Top-Down Fragmentation Of Complex Brain Gangliosides.

A.F. Serb, Corina Flangea, C. Schiopu, E. Sisu, Željka Vukelić, **A. D. Zamfir**

1st Romanian Society for Mass Spectrometry Conference  
"Introducing Life Science Mass Spectrometry in Romania" April 25-29  
2010 Sinaia, Romania  
POSTER PRESENTATION

160. Compositional And Structural Analysis Of Gangliosides In Defined Regions Of Human Brain By Fully Automated Chip-Nanoelectrospray Multistage Mass Spectrometry.  
Alina F. Serb, Corina Flangea, Eugen Sisu, Željka Vukelić, **A. D. Zamfir**  
1st Romanian Society for Mass Spectrometry Conference "Introducing Life Science Mass Spectrometry in Romania" April 25-29 2010 Sinaia, Romania  
POSTER PRESENTATION

161. New glycosylaminoglycan domains revealed by mass spectrometry methods based on chip-nano-ESI.  
Corina Flangea, **A.D. Zamfir**  
13-15 Decembrie 2009; Konstanz, Germany  
INVITED LECTURE

162. A novel platform for top-down proteomics: chip-based nanoelectrospray combined with electron transfer dissociation mass spectrometry  
C. Flangea, C. Schiopu, F. Capitan, C. Mosoarca, M. Manea, E. Sisu, **A.D. Zamfir** Joint Conference of Polish Mass Spectrometry Society and German Mass Spectrometry Society, 4-7 March 2012, Poznan, Poland  
POSTER PRESENTATION

163. Alpha-galactosidase A activity monitoring by fluorometry and mass spectrometry  
M. Galusca, C. Cozma, S. Dilly, **A.D. Zamfir**, M. Przybylski  
Romanian Society for Mass Spectrometry Conference, 1-5 May 2011, Timișoara, Romania  
POSTER PRESENTATION

164. Affinity binding study of Abeta–autoantibody CDR peptide to Abeta (12-40) peptide  
M. Galusca, C. Cozma, **A.D. Zamfir**, M. Przybylski Romanian Society for Mass Spectrometry Conference, 25-29 April 2010, Sinaia, Romania  
POSTER PRESENTATION

165. Microfluidics-mass spectrometry of glycosaminoglycans  
**A.D. Zamfir** 18<sup>th</sup> International Mass Spectrometry Conference, 30 August-4 -September 2009, Bremen, Germany  
INVITED LECTURE

166. Affinity binding study of Abeta–autoantibody CDR peptide to Abeta (12-40) peptide M. Galusca, C. Cozma, **A.D. Zamfir**, M. Przybylski  
Deutsche Gesellschaft für Massenspektrometrie Conference, 7-10 March 2010, Halle, Germany

167. Complex structural composition of accumulated GD1a species in brain tissue of GD3 synthase knockout mice  
D. Marinčić, K. Mlinac, M. Heffer, **A. D. Zamfir**, Ž. Vukelić, S. Kalanj Bognar  
SINAPSA Neuroscience Conference '11, Central European FENS Featured Regional Meeting, Ljubljana, Slovenia, September 22-25, 2011  
POSTER PRESENTATION

168. Chip-based mass spectrometry, a novel concept in glycomics  
**A.D. Zamfir**, F. Peter, E. Sisu  
12th Edition of Academic Days Timisoara, Chemistry  
26-27 May 2011  
ORAL PRESENTATION

169. Mass Spectrometry-Based Characterization of Gangliosides from Selected Brain Tumors: Further Evidences of Aberrant Glycosylation,  
Dragana Marinčić, Željka Vukelić, **A.D. Zamfir**, Alina Serb, Jasna Peter-Katalinić  
2nd International Conference of The Romanian Society For Mass Spectrometry, Timisoara 1-5 Mai, 2011  
ORAL PRESENTATION

170. A Novel Analytical Approach Combining NanoMate and Electron Transfer Dissociation for Top-Down Proteomics  
Corina Flangea, Alina Serb, Cristina Mosoarca, Catalin Schiopu, Roxana Ghiulai, Marilena Manea, Eugen Sisu, **A.D. Zamfir**  
2nd International Conference of The Romanian Society For Mass Spectrometry, Timisoara 1-5 Mai, 2011  
INVITED LECTURE

171. Composition and Structure Analysis of Gangliosides in Human Brain Hemangioma by NanoMate Robot Coupled to Ion Trap Mass Spectrometry,

Florina Capitan, Catalin Schiopu, Corina Flangea, Eugen Sisu, **A. D. Zamfir**  
2nd International Conference of The Romanian Society For Mass Spectrometry, Timisoara 1-5 Mai, 2011  
INVITED LECTURE

172. New Oversulfated Chondroitin/Dermatan Sulfate Sequence Identification in Human Skin Fibroblasts Decorin by Fully Automated Chip-Based Nanoelectrospray Quadrupole Time of Flight Mass Spectrometry, Corina Flangea, Alina Serb, Eugen Sisu, Daniela G. Seidler, Jasna Peter-Katalinić, **A. D. Zamfir**  
2nd International Conference of The Romanian Society For Mass Spectrometry, Timisoara 1-5 Mai, 2011  
ORAL PRESENTATION

173. Ganglioside composition and structure analysis in human dysembryoplastic neuroepithelial tumor  
D. Marinčić, T.Pašalić, Alina Serb, Tomislav Sajko, **A. D. Zamfir**, Ž. Vukelić  
SiNAPSA Neuroscience Conference '11, Central European FENS Featured Regional Meeting, Ljubljana, Slovenia, September 22-25, 2011  
ORAL PRESENTATION

174. Oligomerisation studies of modified A-beta peptides using mass spectrometry  
M.I. Iurascu, C. Cozma, M. Galusca, M. Przybylski, **A.D. Zamfir**  
Joint Conference of Polish Mass Spectrometry Society and German Mass Spectrometry Society, 4-7 March 2012, Poznan, Poland  
POSTER PRESENTATION

175. Clinical diagnostic in dry blood spots by fluorometry and multiple reaction monitoring mass spectrometry  
C. Cozma, M.I. Iurascu, M. Galusca, S. Maeser, M. Przybylski, **A.D. Zamfir**  
Joint Conference of Polish Mass Spectrometry Society and German Mass Spectrometry Society, 4-7 March 2012, Poznan, Poland  
POSTER PRESENTATION

176. Chip-based nanoelectrospray mass spectrometry of fructooligosaccharides produced by levansucrases from Pseudomonas Syringae Pv. Tomato and P. Chlororaphis Subs. P. Aurantiaca  
C. Mosoarca, **A.D. Zamfir**  
Joint Conference of Polish Mass Spectrometry Society and German Mass Spectrometry Society, 4-7 March 2012, Poznan, Poland  
POSTER PRESENTATION

177. High throughput top-down proteomics by chip-based nanoelectrospray in combination with electron transfer dissociation mass spectrometry  
C. Flangea, M. Galusca, M. Manea, **A.D. Zamfir**  
4<sup>th</sup> International Congress and the 30<sup>th</sup> Annual Session of the Romanian Society for Cell Biology, 13-17 June 2012, Satu Mare, Romania  
POSTER PRESENTATION

178. Rapid diagnostic by fully automated chip-based nanoelectrospray ionization mass spectrometry  
C. Flangea, M. Galusca, **A.D. Zamfir**  
4<sup>th</sup> International Congress and the 30<sup>th</sup> Annual Session of the Romanian Society for Cell Biology, 13-17 June 2012, Satu Mare, Romania  
POSTER PRESENTATION

179. Fully automated chip-based nanoelectrospray combined with electron transfer dissociation for high throughput top-down proteomics  
C. Flangea, C. Mosoarca, M. Manea, C. Schiopu, E. Sisu, **A.D. Zamfir**  
International Mass Spectrometry Conference, 11-22 September 2012, Kyoto, Japan  
POSTER PRESENTATION

180. Chip-based electrospray ionization tandem mass spectrometry a novel tool for rapid diagnostic of Fabry disease  
M. Galusca, C. Flangea, C. Mosoarca, C. Cozma, **A.D. Zamfir**  
International Mass Spectrometry Conference, 11-22 September 2012, Kyoto, Japan  
POSTER PRESENTATION

181. Compositional and structural analysis of gangliosides in human fetal cerebellum by chip electrospray mass spectrometry  
F. Capitan, C. Schiopu, C. Mosoarca, C. Flangea, C. Ilie, I. Velea, E. Sisu, **A.D. Zamfir**  
International Symposium Research and Education in Innovation Era, 8-9 November 2012, Arad, Romania  
POSTER PRESENTATION

182. Chip-based electrospray ionization tandem mass spectrometry a novel tool for rapid diagnostic  
M. Galusca, C. Flangea, C. Mosoarca, C. Cozma, **A.D. Zamfir**  
International Symposium Research and Education in Innovation Era, 8-9 November 2012, Arad, Romania  
POSTER PRESENTATION

183. Mapping and sequencing of gangliosides in human astrocytoma by Orbitrap mass spectrometry  
F. Capitan, C. Schiopu, C. Flangea, Ž. Vukelić, **A.D. Zamfir**  
24<sup>th</sup> Mass Spectrometry Forum, 19-23 February, 2013, Vienna, Austria  
ORAL PRESENTATION
184. Rapid diagnosis of Fabry disease by a novel method based on automated chip-nanoelectrospray ionization mass spectrometry  
M. Galusca, C. Flangea, C. Mosoarca, C. Cozma, **A.D. Zamfir**  
24<sup>th</sup> Mass Spectrometry Forum, 19-23 February 2013, Vienna, Austria  
ORAL PRESENTATION
185. Fully automated chip-nanoelectrospray combined with collision induced and electron transfer dissociation  
**A.D. Zamfir**, C. Mosoarca, C. Flangea, C. Cozma, I. Malaescu, M. Przybylski  
46<sup>th</sup> German Society for Mass Spectrometry Conference, 10-14 March 2013, Berlin, Germany  
POSTER PRESENTATION
186. Introducing Orbitrap mass spectrometry for ganglioside biomarker discovery in human brain cancer: application to astrocytoma  
F. Capitan, C. Flangea, A. Petrescu, C. Munteanu, **A.D. Zamfir**  
46<sup>th</sup> German Society for Mass Spectrometry Conference, 10-14 March 2013, Berlin, Germany  
POSTER PRESENTATION
187. Rapid diagnosis through molecular markers identified by advanced mass spectrometry  
C. Mosoarca, C. Flangea, M. Galusca, **A.D. Zamfir**  
5<sup>th</sup> International Congress and the 31<sup>th</sup> Annual Session of the Romanian Society for Cell Biology, 5-9 June 2013, Timișoara, Romania  
POSTER PRESENTATION
188. Chip-based nanoelectrospray ionization tandem mass spectrometry for glycan analysis in biomedical research  
**A.D. Zamfir**  
2<sup>nd</sup> Middle Eastern and Mediterranean Sea Region Countries Mass Spectrometry Conference, June 30 - July 4, 2013, Siena, Italy  
INVITED LECTURE
189. Chip-based mass spectrometry of oligosaccharides produced by levansucrases from *Pseudomonas syringae* pv. tomato and *P. chlororaphis* subsp. *aurantiaca*  
C. Mosoarca, T. Visnapuu, T. Alamăe, **A.D. Zamfir**  
2<sup>nd</sup> Biotechnology World Congress, 10-13 February 2014, Dubai, United Arab Emirates  
POSTER PRESENTATION
190. Top-down analysis by electron transfer/collision induced dissociation of noncovalent protein-ganglioside complexes  
C. Mosoarca, L. Lupu, I. Malaescu, **A.D. Zamfir**  
5<sup>th</sup> Mass Spectrometry Forum, 17-19 February 2014, Vienna, Austria  
ORAL PRESENTATION
191. Applications of chip-based nanoelectrospray MS to lysosomal storage diseases: Schindler disease  
M. Sarbu, A. Robu, R. Ghiulai, J. Peter-Katalinić, **A.D. Zamfir**  
25<sup>th</sup> Mass Spectrometry Forum, 17-19 February 2014, Vienna, Austria  
ORAL PRESENTATION
192. A nanoESI-QTOF MS approach for screening and sequencing of underivatized dextran chains containing up to 35 glucose repeats  
M. Sarbu, R. Ghiulai, **A.D. Zamfir**  
20<sup>th</sup> International Mass Spectrometry Conference, 24-29 August 2014, Geneva, Switzerland  
POSTER PRESENTATION
193. Introduction of chip-based nanoelectrospray mass spectrometry with electron transfer/collision induced dissociation in glycoproteomics  
C. Mosoarca, **A.D. Zamfir**  
20<sup>th</sup> International Symposium on Analytical and Environmental Problems, 22 September 2014, Szeged, Hungary  
ORAL PRESENTATION
194. Nanoelectrospray quadrupole time of flight tandem mass spectrometric analysis of long chain polysaccharides  
**A.D. Zamfir**, M. Sarbu, R. Ghiulai  
20<sup>th</sup> International Symposium on Analytical and Environmental Problems, 22 September 2014, Szeged, Hungary  
POSTER PRESENTATION
195. Nanoelectrospray quadrupole time-of-flight tandem mass spectrometric analysis of long chain polysaccharides  
M. Sarbu, R.M. Ghiulai, **A.D. Zamfir**  
5<sup>th</sup> International Symposium. Research and Education in Innovation Era, 5-6 November 2014, Arad, Romania  
ORAL PRESENTATION

196. Identification of the O-glycoforms expressed in the urine of a patient suffering from Schindler disease using chip-based nano-electrospray tandem mass spectrometry  
A.C. Robu, M. Sarbu, C.C. Darie, J. Peter-Katalinić, **A.D. Zamfir**  
Eastern Analytical Symposium and Exhibition, 17-19 November, Somerset, New Jersey, USA  
POSTER PRESENTATION
197. Glycan biomarker discovery in human gliosarcoma by chip-based nano-electrospray tandem mass spectrometry  
L. Lupu, Ž. Vukelić, C.C. Darie, **A.D. Zamfir**  
Eastern Analytical Symposium and Exhibition, 17-19 November, Somerset, New Jersey, USA  
POSTER PRESENTATION
198. Introducing 2D numerical analysis in modelling of complex carbohydrate mass spectra  
C. Mosoarca, I. Malaescu, Ž. Vukelić, **A.D. Zamfir**, A. Ercuta  
TIM-FIZ 2014 Physics without frontiers, International Physics Conference, 20-22, November 2014, Timișoara, Romania  
POSTER PRESENTATION
199. Chip-based mass spectrometry for Schindler disease type I: detailed analysis of a complex glycopeptide fraction from patient urine  
M. Sarbu, A. Robu, I. Malaescu, **A.D. Zamfir**  
TIM-FIZ 2014 Physics without frontiers, International Physics Conference, 20-22, November 2014, Timișoara, Romania  
POSTER PRESENTATION
200. Novel glycopeptide structures highlighted by Orbitrap MS and MS<sup>2</sup> analysis in the urine of a Schindler disease patient  
M. Sarbu, C.V.A. Munteanu, A. Petrescu, J. Peter-Katalinić, **A.D. Zamfir**  
26<sup>th</sup> Mass Spectrometry Forum, 17-19 February, 2015, Vienna, Austria  
ORAL PRESENTATION
201. High sensitivity Orbitrap mass spectrometry analysis of neural chondroitin/dermatan sulfate domains  
C.V.A. Munteanu, L. Popescu, D.G. Seidler, **A.D. Zamfir**  
26<sup>th</sup> Mass Spectrometry Forum, 17-19 February, 2015, Vienna, Austria  
POSTER PRESENTATION
202. High resolution mass spectrometric analysis of complex ganglioside profile typical to early stage fetal neocortex  
R.M. Ghiulai, M. Sarbu, Ž. Vukelić, C. Ilie, **A.D. Zamfir**  
26<sup>th</sup> Mass Spectrometry Forum, 17-19 February, 2015, Vienna, Austria  
POSTER PRESENTATION
203. Discovering breast cancer biomarkers in human milk by advanced proteomics methods based on mass spectrometry  
A.C. Robu, R. Aslebagh, K.F. Arcaro, C.C. Darie, **A.D. Zamfir**  
26<sup>th</sup> Mass Spectrometry Forum, 17-19 February, 2015, Vienna, Austria  
POSTER PRESENTATION
204. Introducing ion mobility mass spectrometry in glycomics of Schindler disease  
M. Sarbu, F. Zhu, J. Peter-Katalinić, D.E. Clemmer, M. Przybylski, **A.D. Zamfir**  
48<sup>th</sup> German Society for Mass Spectrometry Conference (Deutschen Gesellschaft für Massenspektrometrie-DGMS), 1-4 March 2015, Wuppertal, Germany  
POSTER PRESENTATION
205. Development of advanced proteomics methods based on mass spectrometry for breast cancer biomarker discovery in human milk  
A.C. Robu, R. Aslebagh, C.C. Darie, B. Chait, M. Przybylski, **A.D. Zamfir**  
48<sup>th</sup> German Society for Mass Spectrometry Conference (Deutschen Gesellschaft für Massenspektrometrie-DGMS), 1-4 March 2015, Wuppertal, Germany  
POSTER PRESENTATION
206. Proteomics methods based on gel electrophoresis and nanoLC-MS/MS for discovering new breast cancer biomarkers in human milk  
A.C. Robu, R. Aslebagh, C.C. Darie, B. Chait, M. Przybylski, **A.D. Zamfir**  
1<sup>st</sup> International Symposium Biomolecular Recognition and Mass Spectrometry, 5-7 March 2015, Rüsselsheim, Germany  
POSTER PRESENTATION
207. Compositional and structural analysis of brain chondroitin/dermatan sulfate hexasaccharides by Orbitrap mass spectrometry  
L. Popescu, A.C. Robu, F. D. Munteanu, D.G. Seidler, **A.D. Zamfir**  
3<sup>rd</sup> Mediterranean Sea Region Countries Mass Spectrometry Workshop, 28 June- 2 July 2015, Athens, Greece  
POSTER PRESENTATION
208. Assessment of the noncovalent interaction between  $\beta$ -lactoglobulin detected in human milk and maltooligosaccharides by chip

nano electrospray high resolution tandem mass spectrometry

A.C. Robu, F. Capitan, C. Schiopu, B.T. Chait, **A.D. Zamfir**

3<sup>rd</sup> Mediterranean Sea Region Countries Mass Spectrometry Workshop, 28 June- 2 July 2015, Athens, Greece

POSTER PRESENTATION

209. Clinical applications of chip-based mass spectrometry

**A.D. Zamfir**

25<sup>th</sup> Anniversary Conference of the Romanian Society of Biochemistry and Molecular Biology, 17-18 September, Bucharest, Romania

ORAL PRESENTATION

210. A decade of GlycoRizzi-based Austrian-Romanian mass spectrometry

**A.D. Zamfir**

Bioanalysis Symposium and Honorary Colloquium, 5-6 November 2015, Vienna, Austria

INVITED LECTURE

211. ChipESI MS<sup>n</sup> of Ctb5 monomers-G1 ganglioside complexes.

A. Robu, L. Popescu, F. Capitan, **A.D. Zamfir**

27<sup>th</sup> Mass Spectrometry Forum 23-25 February, 2016, Vienna, Austria

POSTER PRESENTATION

212. Neuroblastoma ganglioside analysis by chip-ESI MS

**A.D. Zamfir**, A. Robu, F. Capitan, C. Schiopu

27<sup>th</sup> Mass Spectrometry Forum 23-25 February, 2016, Vienna, Austria

POSTER PRESENTATION

213. IMS MS and MS/MS of human brain gangliosides

M. Sarbu (Galusca), A. Robu, M. Trion, D. Clemmer, **A.D. Zamfir**

27<sup>th</sup> Mass Spectrometry Forum 23-25 February, 2016, Vienna, Austria

ORAL PRESENTATION

214. Microfluidics-mass spectrometry of brain tumor gangliosides

**A.D. Zamfir**, A. Robu, F. Capitan, C. Schiopu

13<sup>th</sup> International Conference on Nanosciences & Nanotechnologies, 5-9 July, 2016, Thessaloniki, Greece

ORAL PRESENTATION

215. Glycomics of GAG oligosaccharides by high-performance mass spectrometry

A. Robu, L. Popescu, F. D. Munteanu, **A.D. Zamfir**

13<sup>th</sup> International Conference on Nanosciences & Nanotechnologies, 5-9 July, 2016, Thessaloniki, Greece

POSTER PRESENTATION

216. Ion mobility mass spectrometry of glycolipids

M. Sarbu (Galusca), F.D. Munteanu, D. E. Clemmer, **A.D. Zamfir**

13<sup>th</sup> International Conference on Nanosciences & Nanotechnologies, 5-9 July, 2016, Thessaloniki, Greece

POSTER PRESENTATION

217. Development of the advanced mass spectrometry for mapping and structural analysis of human brain gangliosides

M. Sarbu, M. Trion, L. Dehelean, A.C. Robu, F. Munteanu, **A.D. Zamfir**

22<sup>nd</sup> International Symposium on Analytical and Environmental Problems, Szeged, Ungaria. 10 Oct., 2016

ORAL PRESENTATION

218. Assessment of protein-glycan interaction by chip-based mass spectrometry

A.C. Robu, L. Popescu, F.D. Munteanu, **A.D. Zamfir**

22<sup>nd</sup> International Symposium on Analytical and Environmental Problems, Szeged, Ungaria, 10 Oct., 2016

POSTER PRESENTATION

219. Determination of noncovalent FGF2-galactosaminoglycan interaction by chip-based high-resolution mass spectrometry

L. Popescu, A.C. Robu, F.D. Munteanu, **A.D. Zamfir**

a XXXIV-a Conferință Națională de Chimie, Căciulata, Vâlcea, 4-7 Oct., 2016

POSTER PRESENTATION

220. Glycopeptides biomarker discovery in Schindler disease by ion mobility tandem mass spectrometry

M. Sarbu, D.E. Clemmer, **A.D. Zamfir**

10<sup>th</sup> Central and Eastern European Proteomic Conference, Budapesta, Ungaria, 11-14 Oct., 2016

ORAL PRESENTATION

221. Glycomics of brain glycosaminoglycans by high resolution tandem mass spectrometry

- L. Popescu, A.C. Robu, C. Munteanu, **A.D. Zamfir**  
10<sup>th</sup> Central and Eastern European Proteomic Conference, Budapesta, Ungaria, 11-14 Oct., 2016  
POSTER PRESENTATION
222. Age-related and topographic specificity of human brain gangliosides by Orbitrap mass spectrometry  
M. Sarbu, Ž. Vukelić, **A.D. Zamfir**  
28<sup>th</sup> MassSpec Forum Conference, 17-18 februarie 2017, Viena, Austria  
POSTER PRESENTATION
223. Novel developments in high performance electrospray ionization mass spectrometry of glycosaminoglycans  
**A.D. Zamfir**  
28<sup>th</sup> MassSpec Forum Conference, 17-18 februarie 2017, Viena, Austria  
ORAL PRESENTATION
224. Application of high resolution mass spectrometry in glycolipidomics of extracranial tumors  
A.C. Robu, **A.D. Zamfir**  
28<sup>th</sup> MassSpec Forum Conference, 17-18 februarie 2017, Viena, Austria  
POSTER PRESENTATION
225. Screening of human fetal hippocampus gangliosides by ion mobility mass spectrometry  
M. Sarbu, Ž. Vukelić, D.E. Clemmer, **A.D. Zamfir**  
Proceedings of the American Society for Mass Spectrometry Conference, 4-8 June 2017, Indianapolis, USA  
POSTER PRESENTATION
226. Assessment of the noncovalent interaction between FGF-2 and glycosaminoglycans by chip-nanoelectrospray high resolution mass spectrometry  
A.C. Robu, L. Popescu, D.G. Seidler, **A.D. Zamfir**  
Proceedings of the American Society for Mass Spectrometry Conference, 4-8 June 2017, Indianapolis, USA  
POSTER PRESENTATION
227. Chip-nanoESI high resolution mass spectrometry assay for studying the FGF-GAG noncovalent complexes  
A.C. Robu, L. Popescu, D.G. Seidler, **A.D. Zamfir**  
14<sup>th</sup> International Conference on Nanosciences & Nanotechnologies (NN17), 5-9 Jul 2017, Thessaloniki, Greece POSTER PRESENTATION
228. Nanofluidics for mass spectrometry with applications in glycomics for biomedical research  
**A.D. Zamfir**  
14<sup>th</sup> International Conference on Nanosciences & Nanotechnologies (NN17), 5-9 Jul 2017, Thessaloniki, Greece  
ORAL PRESENTATION
229. Ion mobility mass spectrometry: Mapping and structural characterization of human fetal hippocampus gangliosides  
M. Sarbu, Ž. Vukelić, D.E. Clemmer, **A.D. Zamfir**  
14<sup>th</sup> International Conference on Nanosciences & Nanotechnologies (NN17), 5-9 Jul 2017, Thessaloniki, Greece  
POSTER PRESENTATION
230. Profiling and structural characterization by mass spectrometry of region-specific gangliosides in brain  
M. Sarbu, Ž. Vukelić, D.E. Clemmer, **A.D. Zamfir**  
23<sup>rd</sup> International Symposium on Analytical and Environmental Problems 9-10 Oct 2017, Szeged, Hungary  
ORAL PRESENTATION
231. High performance mass spectrometry for advanced interactomics studies  
A.C. Robu, L. Popescu, D.G. Seidler, **A.D. Zamfir**  
23<sup>rd</sup> International Symposium on Analytical and Environmental Problems, 9-10 Oct 2017, Szeged, Hungary  
POSTER PRESENTATION
232. Modern mass spectrometric approaches for biomarker discovery  
**A.D. Zamfir**  
Walsh Seminar, 9-10 Noiembrie 2017, Potsdam, N.Y., USA  
INVITED LECTURE
233. Mass spectrometry of proteoglycans  
**A.D. Zamfir**  
Dept. of Chemistry & Biomolecular Science, 9 Noiembrie 2017, Clarkson University, N.Y., USA  
INVITED LECTURE



234. Microfluidics-mass spectrometry for glycomics in biomedical research  
**A.D. Zamfir**, invited lecture  
Dept. of Chemistry & Biomolecular Science, 10 Nov. 2017, Clarkson University, N.Y., USA  
INVITED LECTURE
235. Chip-nanoESI QTOF MS of FGF2-CS noncovalent interaction  
A.C. Robu L. Popescu, M. Sarbu, D.G. Seidler, **A.D. Zamfir**  
29th MassSpec Forum Vienna, 20-21 Feb. 2018, Vienna, Austria  
ORAL PRESENTATION
236. IMS MS of human fetal hippocampus: novel insights into the ganglioside domain  
M. Sarbu, Ž. Vukelić, D.E. Clemmer, **A.D. Zamfir**  
29th MassSpec Forum Vienna, 20-21 Feb. 2018, Vienna, Austria  
POSTER PRESENTATION
237. ESI MS/MS discovery of a novel brain GT1 ganglioside species  
I.I. Cozma, M. Sarbu, C. Ilie, **A.D. Zamfir**  
29th MassSpec Forum Vienna, 20-21 Feb. 2018, Vienna, Austria  
POSTER PRESENTATION
238. High performance chip-nanoelectrospray tandem mass spectrometry  
characterization of the noncovalent FGF2 – CS complex,  
Popescu L., **A.D. Zamfir**  
TIM 18 Physics Conference, 24-26 May, Timisoara, Romania  
ORAL PRESENTATION
239. Development of novel mass spectrometry approaches for the analysis of brain  
gangliosides and their structural and functional interactions,  
Popescu L., Sarbu M., Robu A.C., **A.D. Zamfir**  
7th International Symposium Research and Education in Innovation Era, 17-20 May  
2018, Arad, Romania  
ORAL PRESENTATION
240. Fibroblast growth factor-glycosaminoglycan noncovalent interaction analysis by  
chip-nanoelectrospray mass spectrometry  
Robu AC, Popescu L, Seidler DG, **A.D. Zamfir**,  
ISREIE, Student Scientific Session, XVlth Edition, 10-12 may, 2018, Arad, Romania  
ORAL PRESENTATION
241. Determination of neuropeptides-human brain gangliosides noncovalent interactions  
by microfluidics tandem mass spectrometry  
Robu AC, Sarbu M, Popescu L, Vukelic Z, **A.D. Zamfir**  
Proceedings of the American Society for Mass Spectrometry Conference, June 3-7  
2018, San Diego, SUA  
ORAL PRESENTATION
242. Ion mobility mass spectrometry of human brain hippocampus gangliosides  
Sarbu M, Vukelic Z, Clemmer D, **A.D. Zamfir**  
Proceedings of the American Society for Mass Spectrometry Conference, June 3-7  
2018, San Diego, SUA  
POSTER PRESENTATION
243. Ion mobility mass spectrometry and chip mass spectrometry analyses for functional and structural interactions of gangliosides  
**Alina D. Zamfir**, Mirela Sarbu, Raluca Ica, Radu Albulescu, Andrei-Jose Petrescu  
Walsh Seminar (January 16th-23th, 2019, New York, USA)  
INVITED LECTURE
244. Fully automated chip-based nanoESI analyses of protein-brain ganglioside interactions  
Laurentiu Popescu, Mirela Sarbu, Raluca Ica, Alina Petrut, **Alina D. Zamfir**  
30th MassSpec Forum Vienna February 16-22, 2019, Vienna, Austria  
POSTER PRESENTATION
245. An advanced mass spectrometry approach for glycolipid biomarker discovery in neurodevelopmental diseases  
Mirela Sarbu, Raluca Ica, Cristian V.A. Munteanu, Andrei J. Petrescu, Alina Petrut, **Alina D. Zamfir**  
30th MassSpec Forum Vienna February 16-22, 2019, Vienna, Austria

POSTER PRESENTATION

246. High resolution mass spectrometry provides novel insights into the structure and functions of gangliosides expressed in nucleus caudatus

Mirela Sarbu, Laurentiu Popescu, Raluca Ica, Cristian V.A. Munteanu, Alina Petrut, Andrei J. Petrescu, **Alina D. Zamfir**  
30th MassSpec Forum Vienna February 16-22, 2019, Vienna, Austria

POSTER PRESENTATION

247. Ganglioside expression and structure in normal human cerebellum: an Orbitrap mass spectrometry survey

Raluca Ica, Mirela Sarbu, Cristian V.A. Munteanu, Alina Petrut, Andrei J. Petrescu, Radu Albuлесcu, **Alina D. Zamfir**  
30th MassSpec Forum Vienna February 16-22, 2019, Vienna, Austria

POSTER PRESENTATION

248. Function and structural protein-glycolipid interaction by high performance mass spectrometry

Alina Secara, Raluca Ica, Mirela Sarbu, Laurentiu Popescu, Alina Petrut, Ligia Petrica, **Alina D. Zamfir**  
17th student scientific session April 11-13, 2019, Arad, Romania

POSTER PRESENTATION

249. Ion mobility mass spectrometry of gangliosides expressed in central nervous system

Mirela Sarbu, Anca Simulescu, Alina Petrut, Ligia Petrica, **Alina D. Zamfir**

17th student scientific session April 11-13, 2019, Arad, Romania

POSTER PRESENTATION

250. Human gangliosidome in severe brain disorders: high resolution mass spectrometry study

Raluca Ica, Mirela Sarbu, Irma Cozma, Andrei J. Petrescu, Cristian V.A. Munteanu, **Alina D. Zamfir**

17th student scientific session April 11-13, 2019, Arad, Romania

POSTER PRESENTATION

251. Determination of ganglioside composition, structure and functional interactions in human brain in health and disease by advanced mass spectrometry

Mirela Sarbu, Raluca Ica, Alina Petrut, Cristian Munteanu, David E. Clemmer, **Alina D. Zamfir**

8th International Symposium Research and Education in Innovation Era May 23-25t, 2019, Arad, Romania

ORAL PRESENTATION

252. Mapping and sequencing of gangliosides in human cerebellum at different developmental stages by Orbitrap multistage mass spectrometry

Raluca Ica, Mirela Sarbu, Alina Petrut, Cristian V.A. Munteanu, Andrei J. Petrescu, Radu Albuлесcu, **Alina D. Zamfir**

67th ASMS Conference on Mass Spectrometry and Allied Topics June 2-6, 2019, Atlanta, USA

ORAL PRESENTATION

253. Ganglioside biomarker discovery and characterization in neurodevelopmental diseases by high resolution multistage mass spectrometry

Mirela Sarbu, Raluca Ica, Cristian V.A. Munteanu, Alina Petrut, **Alina D. Zamfir**

67th ASMS Conference on Mass Spectrometry and Allied Topics June 2-6, 2019, Atlanta, USA

POSTER PRESENTATION

254. Determination of protein-brain ganglioside interactions by chip-based nanoelectrospray quadrupole-time-of-flight tandem mass spectrometry

Laurentiu Popescu, Mirela Sarbu, Raluca Ica, Alina Petrut, **Alina D. Zamfir**

67th ASMS Conference on Mass Spectrometry and Allied Topics June 2-6, 2019, Atlanta, USA

POSTER PRESENTATION

255. Mapping and sequencing of ganglioside in cerebellum by nanoelectrospray high resolution tandem mass spectrometry

Raluca Ica, Mirela Sarbu, Alina Petrut, Cristian V.A. Munteanu, Andrei J. Petrescu, **Alina D. Zamfir**

16th International Conference on Nanosciences & Nanotechnologies (NN19) July 1st-5th, 2019, Thessaloniki, Greece

POSTER PRESENTATION

256. Determination of the structure and functions of glycopingolipids in human nucleus caudatus by Orbitrap multistage mass spectrometry

Mirela Sarbu, Raluca Ica, Alina Petrut, Cristian V.A. Munteanu, Andrei J. Petrescu, Alina D. Zamfir

16th International Conference on Nanosciences & Nanotechnologies (NN19) July 1st-5th, 2019, Thessaloniki, Greece

POSTER PRESENTATION

257. Development of chip-based mass spectrometry for structural and functional protein-brain ganglioside interactions

Raluca Ica, Alina Petrut, **Alina D. Zamfir**

16th International Conference on Nanosciences & Nanotechnologies (NN19) July 1st-5th, 2019, Thessaloniki, Greece

## POSTER PRESENTATION

258. Nano electrospray high resolution mass spectrometry for the discovery of glycolipid biomarkers in neurodevelopmental disorders  
Alina Petrut, Mirela Sarbu, Raluca Ica, Cristian V.A. Munteanu, **Alina D. Zamfir**

16th International Conference on Nanosciences & Nanotechnologies (NN19) July 1st-5th, 2019, Thessaloniki, Greece

## ORAL PRESENTATION

259. An advanced mass spectrometry approach for glycolipid biomarker discovery in neurodevelopmental diseases

Mirela Sarbu, Cristian V.A. Munteanu, Raluca Ica, Alina Petrut, Andrei J. Petrescu, **Alina D. Zamfir**

The annual international conference of the Romanian Society of Biochemistry and Molecular Biology (September 26th-27th, 2019, Iasi, Romania)

## POSTER PRESENTATION

260. Glycosphingolipidomics of human cerebellum by Orbitrap multistage mass spectrometry

The annual international conference of the Romanian Society of Biochemistry and Molecular Biology (September 26th-27th, 2019, Iasi, Romania)

Raluca Ica, Alina Petrut, Andrei J. Petrescu, **Alina D. Zamfir**

## POSTER PRESENTATION

261. Development of advanced mass spectrometric platforms for glycoconjugate mapping, biomarker discovery and study of their functional interactions

**Alina D. Zamfir**, Mirela Sarbu, Alina Petrut, Raluca Ica, Cristian V.A. Munteanu, Anca Simulescu, Andrei J. Petrescu

The annual international conference of the Romanian Society of Biochemistry and Molecular Biology September 26th-27th, 2019, Iasi, Romania

## ORAL PRESENTATION

262. Screening and sequencing of lipid-linked carbohydrates in human caudate nucleus by nano electrospray ionization high resolution tandem mass spectrometry

Alina Petrut, Cristian V.A. Munteanu, Mirela Sarbu, Raluca Ica, **Alina D. Zamfir**, Andrei J. Petrescu.

The annual international conference of the Romanian Society of Biochemistry and Molecular Biology September 26th-27th, 2019, Iasi, Romania

## POSTER PRESENTATION

263. Development of modern high resolution mass spectrometry platform for glycolipid mapping in defined human brain regions

Alina Petrut, Anca Simulescu, Raluca Ica, Mirela Sarbu, Cristian V.A. Popescu, **Alina D. Zamfir**, Andrei J. Petrescu

25th International Symposium on Analytical and Environmental Problems (October 7th-8th 2019, Szeged, Hungary)

## POSTER PRESENTATION

264. Determination of structural-functional interactions of gangliosides with peptides and proteins by microfluidics – mass spectrometry

Raluca Ica, Mirela Sarbu, Alina Secara, Laurentiu Popescu, Alina Petrut, **Alina D. Zamfir**

25th International Symposium on Analytical and Environmental Problems October 7th-8th 2019, Szeged, Hungary

## POSTER PRESENTATION

265. Advanced mass spectrometry techniques for determination of brain ganglioside expression and their functional interactions in healthy and diseased central nervous system

Mirela Sarbu, Raluca Ica, Alina Petrut, Cristian V.A. Munteanu, David E. Clemmer, **Alina D. Zamfir**

25th International Symposium on Analytical and Environmental Problems October 7th-8th 2019, Szeged, Hungary

## ORAL PRESENTATION

266. Identification and characterization of ganglioside structures associated to brain aging by Orbitrap MS

Raluca Ica, Mirela Sarbu, Alina Petrut, Zeljka Vukelic, Andrei Petrescu, **Alina D. Zamfir**

31st Mass Spec Forum 2020, February 24th-28th, 2020, Vienna, Austria

## POSTER PRESENTATION

267. High resolution mass spectrometry profiling and fragmentation of glycolipids expressed in human hemangioma

Alina Petrut, Raluca Ica, Mirela Sarbu, Zeljka Vukelic, Cristian Munteanu, **Alina D. Zamfir**

31st Mass Spec Forum 2020, February 24th-28th, 2020, Vienna, Austria

## POSTER PRESENTATION

268. Microfluidics MS-based assay for studying the noncovalent interactions of  $\beta$ -Amyloid and  $\alpha$ -Synuclein with normal brain and glioma gangliosides

Mirela Sarbu, Anca Simulescu, Zeljka Vukelic, **Alina D. Zamfir**

31st Mass Spec Forum 2020, February 24th-28th, 2020, Vienna, Austria

## POSTER PRESENTATION

269. Ion mobility mass spectrometry for ganglioside biomarker discovery in human cerebrospinal fluid

Sarbu Mirela, Vukelić Željka, Clemmer David E., **Zamfir Alina D.**  
31st Mass Spec Forum 2020, February 24th-28th, 2020, Vienna, Austria  
ORAL PRESENTATION

270. Gangliosides associated to human brain development and aging: a high resolution mass spectrometry study  
Mirela Sarbu, Raluca Ica, Alina Petrut, Željka Vukelić, Alina D. Zamfir  
53rd Annual Conference of the German Society for Mass Spectrometry, Mar. 1-5, 2020, Münster, Germany  
POSTER PRESENTATION

271. Human cerebrospinal fluid: a comprehensive analysis of glycolipid expression and structure by ion mobility mass spectrometry  
Sarbu Mirela, Vukelić Željka, Clemmer David E., **Zamfir Alina D.**  
Rebooted edition of the 68th ASMS Conference on Mass Spectrometry and Allied Topics, 2020  
POSTER PRESENTATION

272. Detailed characterization of aged human brain gangliosidome by high resolution multistage mass spectrometry  
Raluca Ica, Mirela Sarbu, Alina Petrut, Željka Vukelić, Andrei Petrescu, **Alina D. Zamfir**  
Rebooted edition of the 68th ASMS Conference on Mass Spectrometry and Allied Topics, 2020  
POSTER PRESENTATION

273. Developments and applications of chip-based mass spectrometry in glycomics of chondroitin/dermatan sulfate oligosaccharideS  
**A. D. Zamfir**  
2nd Advanced Chemistry World Congress, Berlin **14-15 June 2021**  
INVITED LECTURE

274. Ion mobility mass spectrometry reveals the complexity of ganglioside structures expressed in human cerebrospinal fluid  
M. Sarbu, D. Clemmer, **A.D.Zamfir**  
2nd Advanced Chemistry World Congress, Berlin, 14-15 June 2021  
ORAL PRESENTATION

275. Glycolipidomics of human brain hemangioma by high resolution multistage mass spectrometry  
R. Ica, M. Sarbu, C. V.A. Munteanu, **A. D. Zamfir**  
2nd Advanced Chemistry World Congress, Berlin, 14-15 June 2021  
ORAL PRESENTATION

276. Brain glycomics by novel mass spectrometry approaches based on ion mobility and chip-nanoelectrospray ionization  
**A.D. Zamfir**, M. Sarbu, R.Ica, D. E. Clemmer, Z.Vukelić  
45th FEBS Congress, Ljubljana (Slovenia) 3-8 July 2021  
INVITED LECTURE

277. Discovery of novel biomarkers in human brain hemangioma by advanced mass spectrometric methods  
R.Ica, M. Sarbu, Ž. Vukelić, **A. D. Zamfir**  
45th FEBS Congress, Ljubljana (Slovenia) 3-8 July 2021  
POSTER PRESENTATION

278. GalNAc-GD1 is a biomarker of cerebrospinal fluid as revealed by nanoESI ion mobility mass spectrometry  
M. Sarbu, D.E. Clemmer, **A.D. Zamfir**  
18th International Conference on Nanosciences and Nanotechnologies (NN21), 6-9 July 2021, Thessaloniki, Greece  
POSTER PRESENTATION

279. Nanoelectrospray ionization high resolution mass spectrometry of glycolipids expressed in human cortex  
R. Ica, Ž. Vukelić, **A. D. Zamfir**  
18th International Conference on Nanosciences and Nanotechnologies (NN21), 6-9 July 2021, Thessaloniki, Greece  
POSTER PRESENTATION

280. Determination of human motor cortex gangliosidome by nanoelectrospray high resolution multistage mass spectrometry  
R. Ica, C. V.A. Munteanu, Ž. Vukelić, A. D. Zamfir,  
69th ASMS Conference on Mass Spectrometry and Allied Topics, 31 Oct- 4 Nov 2021 Philadelphia, USA  
POSTER PRESENTATION

281. Ion mobility mass spectrometry of human glioblastoma gangliosides  
M. Sarbu, L. Petrica, D.E. Clemmer, Ž. Vukelić, **A.D. Zamfir**  
69th ASMS Conference on Mass Spectrometry and Allied Topics, 31 Oct- 4 Nov 2021 Philadelphia, USA  
POSTER PRESENTATION

282. Ion mobility separation mass spectrometry reveals the occurrence in human cerebrospinal fluid of atypical GalNAc-GD1c glycoforms

M. Sarbu, D.E. Clemmer, **A.D. Zamfir**

69th ASMS Conference on Mass Spectrometry and Allied Topics, 31 Oct- 4 Nov 2021 Philadelphia, USA

POSTER PRESENTATION

283. Mirela Sarbu, David E. Clemmer, Željka Vukelić, **Alina D. Zamfir**

Glycosphingolipidomics of human glioblastoma multiforme by ion mobility tandem mass spectrometry

70th ASMS Conference on Mass Spectrometry and Allied Topics (ASMS 2022), 5-9 June 2022 (Minneapolis, MN, USA)

POSTER PRESENTATION

284. Raluca Ica, Edie M. Sharon, Mirela Sarbu, David E. Clemmer, **Alina D. Zamfir**

Discovery and characterization of irregularly sulfated chondroitin/dermatan sulfate domains in human decorin by ion mobility tandem mass spectrometry

70th ASMS Conference on Mass Spectrometry and Allied Topics (ASMS 2022), 5-9 June 2022 (Minneapolis, MN, USA)

POSTER PRESENTATION

285. Raluca Ica, Kristina Mlinac-Jerković, Katarina Ilić, Tomislav Sajko, **Alina D. Zamfir**, Svjetlana Kalanj-Bognar

Determination of gangliosides associated to temporal lobe epilepsy by high resolution tandem mass spectrometry

70th ASMS Conference on Mass Spectrometry and Allied Topics (ASMS 2022), 5-9 June 2022 (Minneapolis, MN, USA)

POSTER PRESENTATION

286. Mirela Sarbu, Dragana Fabris, Željka Vukelić, David E. Clemmer, **Alina D. Zamfir**

IMS MS of human cerebrospinal fluid: novel insights into the structure of ganglioside isomers identified de novo

32<sup>nd</sup> Mass Spectrometry Forum 2022 (Vienna, Austria, 5-6 July 2022)

POSTER PRESENTATION

287. Mirela Sarbu, Raluca Ica, Roxana Biricioiu, David E. Clemmer, **Alina D. Zamfir**

IMS MS reveals novel hybrid chondroitin/dermatan sulfate domains in human decorin

32<sup>nd</sup> Mass Spectrometry Forum 2022 (Vienna, Austria, 5-6 July 2022)

POSTER PRESENTATION

288. R. Ica, Ž. Vukelić, **A. D. Zamfir**

Characterization by high resolution mass spectrometry of glycolipids expressed in human cortex

32<sup>nd</sup> Mass Spectrometry Forum 2022 (Vienna, Austria, 5-6 July 2022)

POSTER PRESENTATION

289. M. Sarbu, Ž. Vukelić, D.E Clemmer, **A.D. Zamfir**

Nano electrospray ionization ion mobility mass spectrometry for biomarker discovery in malignant brain tumors

19th International Conference on Nanosciences & Nanotechnologies (NN22), 5-8 July 2022, Thessaloniki, Greece

POSTER PRESENTATION

290. Raluca Ica, Mirela Sarbu, Edie M. Sharon, David E. Clemmer, **Alina D. Zamfir**

Nano electrospray ion mobility mass spectrometry for the analysis of chondroitin/dermatan sulfate oligosaccharides

19th International Conference on Nanosciences & Nanotechnologies (NN22), 5-8 July 2022, Thessaloniki, Greece

POSTER PRESENTATION

291. Raluca Ica, Cristian V.A. Munteanu, Svjetlana Kalanj-Bognar, **Alina D. Zamfir**

Implementation of advanced mass spectrometry methods based on nano electrospray for glycolipidome analysis in neurological diseases, 19th International Conference on Nanosciences & Nanotechnologies (NN22), 5-8 July 2022, Thessaloniki, Greece

POSTER PRESENTATION

292. High resolution mass spectrometry analysis of human brain hemangioma gangliosidome

Raluca Ica, Mirela Sarbu, Cristian V.A. Munteanu, **Alina D. Zamfir**

24th International Mass Spectrometry Conference (IMSC 2022), 27 August - 2 Sept, Maastricht, The Netherlands

POSTER PRESENTATION

293. Mirela Sarbu, Dragana Fabris, Željka Vukelić, David E. Clemmer, **Alina D. Zamfir**

Development and application of ion mobility tandem mass spectrometry for the investigation of human cerebrospinal fluid

gangliosidome 24th International Mass Spectrometry Conference (IMSC 2022), 27 August - 2 Sept, Maastricht, The Netherlands

ORAL PRESENTATION

294. Mirela Sarbu, Raluca Ica, Edie M. Sharon, David E. Clemmer, **Alina D. Zamfir**

Combining size-exclusion chromatography and ion mobility mass spectrometry for the identification of chondroitin/dermatan sulfate octamers in decorin

24th International Mass Spectrometry Conference (IMSC 2022), 27 August - 2 Sept, Maastricht, The Netherlands

POSTER PRESENTATION

295. Raluca Ica, Mirela Sarbu, Roxana Biricioiu, Ana-Maria Crumpei, Edie Sharon, David E. Clemmer, **Alina D. Zamfir**  
Characterization of hybrid chondroitin/dermatan sulfate octasaccharide domains in human brain by ion mobility tandem mass spectrometry, 28th International Symposium on Analytical and Environmental Problems, 14-15 Nov. 2022, Szeged, Hungary  
POSTER PRESENTATION
296. Mirela Sarbu, David E. Clemmer, Željka Vukelić, **Alina D. Zamfir**  
Screening and sequencing of sialylated glycosphingolipids in human glioblastoma by ion mobility mass spectrometry  
28th International Symposium on Analytical and Environmental Problems, 14-15 Nov. 2022, Szeged, Hungary  
ORAL PRESENTATION
297. **Alina D. Zamfir** Mapping and Structural Analysis of Chondroitin/Dermatan Sulfate Domains in Human Brain by Advanced Mass Spectrometric Methods 3rd Global Summit on Brain Disorders & Therapeutics, February 15-16, 2023 (webinar)  
INVITED LECTURE
298. **Alina D. Zamfir** Glycomics of Human Brain Chondroitin/Dermatan Sulfate Domains by Advanced Mass Spectrometric Methods International Conference Smart Diaspora 2023, April 10-13, 2023, Timisoara, Romania  
KEYNOTE LECTURE
299. **Alina D. Zamfir**, Mirela Sarbu, Raluca Ica, Edie Sharon, David E. Clemmer, Ion mobility mass spectrometry of chondroitin sulfate in human decorin, Vienna Mass Spectrometry Forum, April 13-14, Vienna, Austria  
ORAL PRESENTATION
300. Raluca Ica, Kristina Mlinac-Jerković, Svjetlana Kalanj-Bognar, **Alina D. Zamfir**, Glycosphingolipidomics of temporal lobe epilepsy by high-resolution tandem mass spectrometry, Vienna Mass Spectrometry Forum, April 13-14, Vienna, Austria  
POSTER PRESENTATION
301. Mirela Sarbu, Raluca Ica, Edie Sharon, David E. Clemmer, **Alina D. Zamfir**, IMS MS reveals oversulfated chondroitin sulfate disaccharide domains in human biglycan Vienna Mass Spectrometry Forum, April 13-14, 2023, Vienna, Austria  
POSTER PRESENTATION
302. Raluca Ica, Kristina Mlinac-Jerković, **Alina D. Zamfir**, Svjetlana Kalanj-Bognar  
High resolution tandem mass spectrometry reveals novel glycoconjugate markers of human temporal lobe epilepsy  
3rd Global Summit on Brain Disorders and Therapeutics February 15-16, 2023 (webinar)  
ORAL PRESENTATION
303. Mirela Sarbu, David E. Clemmer, Željka Vukelić, **Alina D. Zamfir**  
Glycomics of glioblastoma brain tumor by ion mobility separation mass spectrometry  
3rd Global Summit on Brain Disorders and Therapeutics February 15-16, 2023 (webinar)  
ORAL PRESENTATION
304. Mirela Sarbu, Željka Vukelić, Dragana Fabris, David E. Clemmer, **Alina D. Zamfir**  
Cartografierea si analiza structurala a gangliozidelor din lichidul cefalorahidian prin spectrometrie de masa cu mobilitate ionica  
Smart Diaspora Conference 2023, Timisoara, Romania, 10-13 April  
ORAL PRESENTATION
304. Maria-Roxana Biricioiu, Mirela Sarbu, Raluca Ica, **Alina D. Zamfir**  
Human cerebellum gangliosides in brain development and aging: an ion mobility mass spectrometry study  
Sesiunea de comunicări științifice studențești, Universitatea Aurel Vlaicu din Arad, Romania, Ediția a XXI-a, 29-31 May 2023  
ORAL PRESENTATION
305. Mirela Sarbu, Raluca Ica, Edie Sharon, David E. Clemmer, **Alina D. Zamfir**  
Ion mobility tandem mass spectrometry of chondroitin sulfate disaccharide domains in biglycan  
71st ASMS Conference on Mass Spectrometry and Allied Topics, Houston, Texas, USA, 4-8 June 2023  
POSTER PRESENTATION
306. Mirela Sarbu, David E. Clemmer, Željka Vukelić, **Alina D. Zamfir**  
Brain metastasis of lung adenocarcinoma: gangliosidome investigation by ion mobility tandem mass spectrometry  
71st ASMS Conference on Mass Spectrometry and Allied Topics, Houston, Texas, USA, 4-8 June 2023  
POSTER PRESENTATION
307. Raluca Ica, Anca Suteanu-Simulescu, Mirela Sarbu, Ligia Petrica, **Alina D. Zamfir**  
Determination of gangliosides in urine of patients suffering from diabetic kidney disease by high resolution tandem mass spectrometry  
71st ASMS Conference on Mass Spectrometry and Allied Topics, Houston, Texas, USA, 4-8 June 2023  
POSTER PRESENTATION
308. **Alina D. Zamfir**, Mirela Sarbu, Raluca Ica, Edie Sharon, David E. Clemmer

Glycomics of human decorin by nano electrospray ion mobility tandem mass spectrometry  
20th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, Greece, 4-7 July 2023  
POSTER PRESENTATION

309. Mirela Sarbu, Raluca Ica, Edie Sharon, David E. Clemmer, **Alina D. Zamfir**  
Determination of the active domains in chondroitin/dermatan sulfates from human biglycan by nano electrospray ion mobility mass spectrometry  
20th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, Greece, 4-7 July 2023  
POSTER PRESENTATION

310. Raluca Ica, Mirela Sarbu, Kristina Mlinac-Jerkovic, Svjetlana Kalanj-Bognar, **Alina D. Zamfir**  
Nano electrospray ionization mass spectrometry reveals novel glycolipids biomarker associated with human temporal lobe epilepsy  
20th International Conference on Nanosciences & Nanotechnologies, Thessaloniki, Greece, 4-7 July 2023  
POSTER PRESENTATION

311. Mirela Sarbu, Raluca Ica, **Alina D. Zamfir**  
Identification of novel potentially active chondroitin/dermatan sulfate domains in human decorin by ion mobility mass spectrometry  
The Annual international conference of RSBMB, Cluj Napoca, Romania, 13-15 September 2023  
ORAL PRESENTATION

312. Mirela Sarbu, David E. Clemmer, Željka Vukelić, **Alina D. Zamfir**  
Glycolipidomics of human glioblastoma multiforme by ion mobility mass spectrometry  
The Annual international conference of RSBMB, Cluj Napoca, Romania, 13-15 September 2023  
POSTER PRESENTATION

313. Raluca Ica, Kristina Mlinac-Jerković, Svjetlana Kalanj-Bognar, Cristian V.A. Munteanu, Andrei J. Petrescu, **Alina D. Zamfir**  
Profiling and structural characterization of gangliosides in human temporal lobe epilepsy  
The Annual international conference of RSBMB, Cluj Napoca, Romania, 13-15 September 2023  
POSTER PRESENTATION

314. Maria-Roxana Biricioiu, Mirela Sarbu, Raluca Ica, **Alina D. Zamfir**  
Ion mobility mass spectrometry of human cerebellum gangliosides  
The Annual international conference of RSBMB, Cluj Napoca, Romania, 13-15 September 2023  
POSTER PRESENTATION

315. **Alina D. Zamfir**, Mirela Sarbu, Raluca Ica  
Development of ion mobility mass spectrometry for the analysis of chondroitin/dermatan sulfate glycosaminoglycans  
15th Edition of the International Conference "New Trends in Chemistry Research" Timisoara, Romania, 21-22 September 2023  
PLENARY LECTURE

316. Maria-Roxana Biricioiu, Mirela Sarbu, Raluca Ica, **Alina D. Zamfir**  
The composition of human cerebellum associated gangliosides is highly complex as revealed by ion mobility tandem mass spectrometry 15th Edition of the International Conference "New Trends in Chemistry Research" Timisoara, Romania, 21-22 September 2023  
POSTER PRESENTATION

317. Raluca Ica, Mirela Sarbu, Svjetlana Kalanj-Bognar, **Alina D. Zamfir**  
Glycolipidomics of human temporal lobe epilepsy: a high resolution tandem mass spectrometric study  
15th Edition of the International Conference "New Trends in Chemistry Research" Timisoara, Romania, 21-22 September 2023  
POSTER PRESENTATION

318. Mirela Sarbu, David E. Clemmer, **Alina D. Zamfir**  
Ion mobility tandem mass spectrometry of human cerebrospinal fluid gangliosidome  
15th Edition of the International Conference "New Trends in Chemistry Research" Timisoara, Romania, 21-22 September 2023  
POSTER PRESENTATION

319. Maria-Roxana Biricioiu, Mirela Sarbu, Raluca Ica, **Alina D. Zamfir**  
Glycolipidomics of human cerebellum in development and aging by ion mobility tandem mass spectrometry,  
29th International Symposium on Analytical and Environmental Problems, Szeged, Hungary, 13-14 November 2023  
POSTER PRESENTATION

320. Raluca Ica, Mirela Sarbu, Anca Suteanu-Simulescu, **Alina D. Zamfir**  
Screening and fragmentation analysis of human renal ganglioside by high resolution tandem mass spectrometry  
34th Mass Spectrometry Forum, Vienna, Austria, 21-23 February, 2024  
POSTER PRESENTATION

321. Raluca Ica, Mirela Sarbu, **Alina D. Zamfir**

Ion mobility mass spectrometry of chondroitin/dermatan sulfate oligosaccharides from human brain

34th Mass Spectrometry Forum, Vienna, Austria, 21-23 February, 2024

POSTER PRESENTATION

322. Maria Roxana Biricioiu, Mirela Sarbu, Raluca Ica, **Alina D. Zamfir**

Detailed comparative analysis of human cerebellum gangliosides in different developmental stages by ion mobility tandem mass spectrometry

34th Mass Spectrometry Forum, Vienna, Austria, 21-23 February, 2024

POSTER PRESENTATION

323. Mirela Sarbu, Raluca Ica, Eddie Sharon, David Clemmer, **Alina D. Zamfir**

Human biglycan chondroitin/dermatan sulfates: an ion mobility mass spectrometry study

34th Mass Spectrometry Forum, Vienna, Austria, 21-23 February, 2024

POSTER PRESENTATION