



Curriculum Vitae

MONICA ILIES, Ph.D.



EDUCATION

- University of Pennsylvania, Post-doctoral Researcher (Bioorganic/inorganic Chemistry), 2004-2009
- University of Texas Medical Branch, Post-doctoral Researcher (Molecular Biology), 2003-2004
- University of Florence (Italy), Post-doctoral Researcher (Bioorganic Chemistry), 2002-2003
- Polytechnic University (Romania), PhD (Bioorganic Chemistry), 1997-2002
- University of Bucharest (Romania), MSc (Organic Chemistry), 1995-1997
- University of Bucharest (Romania), BS (Hons.) (Chemistry), 1990-1995

ACADEMIC APPOINTMENTS

- Teaching Professor - Department of Chemistry, Drexel University, 2022-present
- Associate Teaching Professor - Department of Chemistry, Drexel University, 2016-2021
- Assistant Teaching Professor - Department of Chemistry, Drexel University, 2010-2015
- Adjunct Professor of Chemistry - Widener University, 2010
- Adjunct Professor of Biochemistry - Arcadia University, 2009-2010
- Research Associate - University of Pennsylvania, 2009-2010
- Assistant Professor, tenure-track - Chemistry Department, School of Biotechnologies, 2002-2003
(leave of absence 2003-2006)
- Lecturer and Research Fellow - Chemistry Department, School of Biotechnologies, 1997-2002

TEACHING EXPERIENCE

• **Teaching Professor (2022-present), Associate Teaching Professor (2016-2021), and Assistant Teaching Professor (2010-2016)** at Drexel University, Department of Chemistry:

- **coordination of general chemistry service courses** CHEM 101 and CHEM 102
(since 2013; 675-1300 students; ~20-30 instructors);

- **organization of departmental tutoring** for general chemistry, organic chemistry, and applied chemistry;

- **Lectures:**

100-level:

• **general chemistry** (both *atoms first approach* and *molecular approach* teaching strategies):

- **CHEM 101-102:** science non-majors, **85-230 students/class;**

- **CHEM 121:** chemistry majors, **20-40 students/class;**

200-level:

- **organic chemistry:**
 - **CHEM 241, CHEM 243:** science non-majors, **80-150 students/class;**
- **CHEM 201 "Why Things Work: Everyday Chemistry":** **20-50 students/class**
(including the Gateway Section for International Students)

300-level:

- **medicinal chemistry:** I developed this course as the first undergraduate medicinal chemistry class offered at Drexel University
 - **CHEM 375:** ~ **20 students/class;**

- Laboratory Courses:

- **organic chemistry:**
 - **CHEM 244, CHEM 245:** ~ **12-14 students/class;**

- Laboratories and Recitations as course components (up to **24-30 students/class):**

- **CHEM 101, 102** (general chemistry for non-majors);
- **CHEM 103** (introductory organic chemistry for non-majors);
- **CHEM 121, 122** (general chemistry for chemistry majors);
- **CHEM 123** (introductory organic chemistry for chemistry majors);
- **CHEM 151** (applied chemistry for business majors);
- **CHEM 249** (organic chemistry for chemistry majors);
- **2 laboratory manuals published** and major revisions to existing laboratory manuals;
- **active learning/evidence-based teaching strategies and assessment/feedback techniques:**
 - think-pair-share and "study-buddy";
 - muddiest point cards/slides;
 - inquiry-based teaching & learning;
 - reciprocal questioning;
 - comprehension ("explain why") and connector ("connect-the-dots") question stems;
 - student Power Point presentations and mock-research talks/seminars;
 - partially flipped classroom;
 - integrated content delivery;
 - customized homework w. detailed Answer Key, detailed study guides, and grading rubrics;
 - teaching technologies:
 - Turning Point technology (clickers); BbLearn; interactive online homework;
 - Turnitin and BbLearn assignments;
 - discussion boards.

● **Adjunct Professor (2009-2010):**

Arcadia University, Glenside, PA (~60 students/class) and Christiana, DE (~40 students/class):

- **biochemistry** course (**Physician Assistant Program - PA 511 Bioscience; 40-60 students/class**);

Widener University, Chester, PA (2010):

- **general chemistry** laboratories (**Nursing Program - 24 students/class**).

● **Assistant Professor**, tenure-track (**2002-2003**; leave of absence 2003-2006):

University of Agricultural Sciences and Veterinary Medicine Bucharest, School of Biotechnologies,
Department of Chemistry, Bucharest, Romania:

- **inorganic and general chemistry** lectures (**125 students/class**);
- **one textbook** published.

● **Junior Assistant Professor, Lecturer, and Research Fellow (1997-2002):**

- **inorganic chemistry** lectures;
- **organic and inorganic chemistry** laboratory courses;
- **2 laboratory manuals published.**

TEACHING AWARDS

2023 *American Chemical Society (ACS) Division of Chemical Education Travel Award*

2022 *College of Arts and Sciences Teaching Excellence Award*

2021 *Barbara G. Hornum Award for Teaching Excellence*

2020 *2020 Drexel Teaching Academy Award* - first inaugural Drexel Teaching Academy organized by the Teaching and Learning Center at Drexel University

2020 *CASTLE Remote Teaching Grant* (from the Center for the Advancement of STEM Teaching and Learning Excellence)

2017 *Evidence-Based Teaching Award in Undergraduate Science, Technology, Engineering and Math Education (STEM)*

2016 *STEM Education Travel Award (Drexel HHMI Award, 52008094)*

ADVISING AND MENTORING

- **Faculty mentor (Drexel University - CANOPI program)** (since 2023);
- **Graduate Student Adviser - Chemistry Department** (since 2022);
- **panelist** for Drexel Q&A panel for the **Graduate Research Fellowship Program (GRFP)** (since 2021);
- **teaching mentor** for teaching assistants in the **Certificate in College Teaching** (initiated by the Graduate College and the Teaching & Learning Center) (since 2021);
- **Liberty Scholar Mentor** (2021-2022);
- multiple Ph.D. thesis committees (2011-present).

SERVICE

INTRAMURAL:

Drexel 2020 Service Recognition Award

Drexel 2015 Service Recognition Award

UNIVERSITY COMMITTEES AND ADMINISTRATIVE APPOINTMENTS

- chair of:

- Senate Committee on Academic Affairs (since 2023);
- Graduate Senate Committee on Academic Affairs (since 2016);

- member of:

- Council for Innovation in Teaching & Learning (since 2023)
- Provost's Office Working Group on Initial Course Participation (2023);
- Provost's Office Working Group on Revision of the New Program Approval Process (2023-2024);
- Senate Committee on Academic Affairs (2014-present);
- Academic Coordination Committee (renamed New Program Review Committee) (since 2018);
- Advisory Board of the Teaching & Learning Center (since 2019);
- Drexel Learning Alliance (since 2015);
- Curricular Innovation in Graduate/Post-undergraduate Education Committee (since 2021);
- Graduate Education Imperative Committee (since 2021);
- Early Warning System Committee (2020);
- Labs-at-Home Operations Committee (2020);
- reviewer for the *Barbara G. Hornum Award* for Teaching Excellence (2020; 2022);
- Director of Teaching & Learning Center Search Committee (2019);
- Student Life Awards Election Committee (2015-2017).

COLLEGE COMMITTEES AND ADMINISTRATIVE APPOINTMENTS

- member of:

- CoAS Strategic Staffing Initiative Committee (2023);
- CoAS Lab Working Committee (summer 2021);
- Non-Tenure Teaching Promotion Committee (2020): Christina Love (Physics);
- Department Head Review Committee (2020);
- invited guest of the Curriculum Committees of CoAS and of the BA working group (2014-2019);
- CoAS Faculty Senate Caucus (February 2015 – present);

- reviewer in the "Anonymous Campus Review process for Drexel applicants to the NSF's Graduate Research Fellowship Program (GRFP)" (2020 - 2022).

CHEMISTRY DEPARTMENT COMMITTEES AND ADMINISTRATIVE APPOINTMENTS

- member of:

- NTT Faculty Search Committee (2023)
- Associate Professor in Biochemistry/Chemical Biology Search Committee (Sept 2021 - 2022)
- Lab Manager Search Committee (2021);
- Chemistry Department Laboratory Specialist Search (2019);
- working groups (2018-2019):
 - “*Optimizing teaching through pedagogical changes – theoretical*”
 - “*Optimizing teaching through pedagogical changes – practical*”
- Department Head Search Committee (2014-2015);
- Undergraduate Affairs Committee (2012-present);
- Committee for the Development of a ‘Chemistry Majors Only’ sequence (2011-2013);
- coordination of general chemistry service courses CHEM 101 and CHEM 102 (675-1300 students; ~20-30 instructors) (2013 - present);
- multiple Ph.D. thesis committees (2011-present).

OTHER UNIVERSITY/COLLEGE/DEPARTMENT ACTIVITIES

- participation in the Department/College activities:
 - the Open Houses (2-3 times/year) for:
 - accepted Drexel students;
 - high-school juniors and prospective science students;
 - judge for :
 - DPG Contest STEM category: 2012-2016;
 - Research Day; 2012-2016;
 - STAR Scholars Summer Showcase: 2015-2017;
- Convocation and Commencement: student or faculty marshal (2011 - present);
- University and CoAS Collegial Assemblies;
- Faculty Social hours organized by the Dean’s, Provost’s, and/or President’s Office.

EXTRAMURAL:

- **member of the national ACS Examinations Institute committees** for the standardized general chemistry exams (since 2019):

2023-2024

- ACS Exams Institute: **General Chemistry First Term Exam (GC 25)**

2019-2020

- ACS Exams Institute: **General Chemistry First Term Exam (GC 21)**



FIRST-TERM GENERAL CHEMISTRY

Prepared by the Examinations Institute of the American Chemical Society
Division of Chemical Education through its First-Term General Chemistry Committee.

Examinations Institute

K.L. Murphy, Director
J.R. Raker, Associate Director

Board of Trustees

A. Grushow (2012-2023) Chair
E. Posthuma-Adams (2016-2022)
D. Cullen (2017-2022)
D. Del Carlo (2019-2021)
W. Donovan (2014-16, 2019-2021)
C. Valdez Gauthier (2016-2021)
T. Jose (2015-2023)
J. Krieger (2020-2022)
R. Moog (2021-2023)

First-Term General Chemistry Committee

Thomas Pentecost, Chair
Grand Valley State University, MI

Derek Behmke, *Georgia Gwinnett College, GA*
Ashley Curtiss, *Auburn University, AL*
Michael Danahy, *Bowdoin College, ME*
Kendra Evans, *University of Detroit Mercy, MI*
Susan Henderson,

University of Colorado Boulder, CO

Monica Ilies, *Drexel University, PA*

Lisa Kendhammer,

California State University, Chico, CA

Dmytro Kosenkov, *Monmouth University, NJ*

Elmer-Rico Mojica, *Pace University, NY*

Jill Robinson, *Indiana University, IN*

Edward Zovinka, *Saint Francis University, PA*

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No part of this exam may be copied in any way for any purpose. It is illegal to copy, scan, photograph, digitally reproduce, and/or distribute the contents of this exam in any manner.

- editorial activity:

- general chemistry **textbook reviewer** (2019-2020);

- **reviewer** for:

Journal of Chemical Education, Journal of Medicinal Chemistry, ChemMedChem, ACS Omega, Bioorganic & Medicinal Chemistry, Bioorganic & Medicinal Chemistry Letters (2011- present);

- **academic evaluator** for The American Medical College Application Service (AMCAS), American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS), Common Application for undergraduate college admission;

- **panelist** for the 2015 and the 2016 National Defense Science and Engineering Graduate (NDSEG) Fellowship - Department of Defense (DoD) and the American Society for Engineering Education (ASEE);

- **Philadelphia Science Festival** (member of Dr. Daniel King's team): 2014 - 2019.

RESEARCH EXPERIENCE

• Bioorganic/inorganic chemistry and chemical biology:

- inhibitors and activators of metalloenzymes connected with physiopathology - design, multi-step synthesis, and biological evaluation of isozyme/organ-selective, topically active derivatives used to investigate structural particularities and biological functions of these proteins;

- chemistry of 5- and 6-membered ring heterocycles; sulfonamides; hydroxamic, boronic and amino acids derivatives.

● **Bioinorganic chemistry and biochemistry:**

- structure and functions of metalloenzymes (carbonic anhydrase, arginase, matrix metalloproteinases);
- spectrometric techniques for structural analysis of small and medium-sized molecules and of their supra-molecular assemblies: ^1H -, ^{13}C -, ^{19}F -, ^{11}B -, and 2D-NMR; gel-permeation chromatography (GPC); high performance liquid chromatography (HPLC); matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF); mass spectrometry (MS); differential scanning calorimetry (DSC); circular dichroism (CD);
- biochemistry/molecular biology techniques for enzyme expression and purification; immunodetection (Western blotting); tissue culture techniques; DNA purification;
- enzyme kinetics: radioactive assays; spectrophotometric assays (UV-Vis); surface plasmon resonance (SPR); isothermal titration calorimetry (ITC).

PUBLICATIONS AND PRESENTATIONS

<http://scholar.google.com/citations?user=mEKhJ3cAAAAJ&hl=en>

- 25 scientific papers in peer-reviewed journals
- 1 textbook
- 2 book chapters
- 4 laboratory manuals

Invited Workshops:

2022

A. Kenner, **M. Ilies**, "*What I wish I'd known when I started this job*" - new faculty orientation, Drexel University

2020

M. Ilies, J. Inman, "*Partially flipping the remote classroom*" - Teaching & Learning Center, Drexel University

Invited Talks

2023

M. Ilies, "*The dos and don'ts of teaching chemistry to college students: an intercontinental experience*", Abstracts of Papers, ACS National Meeting & Exposition, Indianapolis, Indiana, USA, March 26-30, 2023 (Division of Chemical Education, SESSION: General Papers)

2019

M. Ilies, "*Electronic and steric effects: Gateway to making organic chemistry resonate with students*", Abstracts of Papers, ACS National Meeting & Exposition, Orlando, Florida, USA, March 31- April 4, 2019, CHED-92 (Division of Chemical Education, SESSION: Active Learning in Organic Chemistry)

2018

M. Ilies, *"Active learning via the "study buddy" system and team-presentations"*, Abstracts of Papers, 255th ACS National Meeting & Exposition, New Orleans, LA, USA, March 18-22, 2018, CHED-242 (Division of Chemical Education, SESSION: Active Learning in the General Chemistry Curriculum)

M. Ilies, *"Evidence-Based Teaching Methods to Promote STEM Active Learning"*, CASTLE (Center for the Advancement of STEM Teaching and Learning Excellence) Pedagogical Happy Hour, Drexel Univ., February 22

2017

M. Ilies, *"Using organic chemistry to teach clinical diagnosis skills"*, Abstracts of Papers, 253rd ACS National Meeting & Exposition, Philadelphia, PA, USA, April 2-6, 2017, CHED-170.

2016

M. Ilies, *"Organic chemistry-general chemistry-biochemistry: A pedagogic bridge circuit"*, Abstracts of Papers, 252nd ACS National Meeting, Philadelphia, PA, USA, August 21-25, 2016, CHED-23.

M. Ilies and D.B. King, *"How to efficiently steer the ship while steering clear of dictatorship"*, Abstracts of Papers, 252nd ACS National Meeting & Exposition, Philadelphia, PA, USA, August 21-25, 2016, CHED-395.

M. Ilies, *"Computer-based pedagogical strategies in large general chemistry classes to increase STEM undergraduate retention"*, Abstracts of Papers, 251st ACS National Meeting & Exposition, San Diego, CA, USA, March 13-17, 2016, CHED-1803.

2014 *"Using response devices in the classroom"* - Drexel Center for Academic Excellence

2008 ACS – Med Chem Division: *"2-Aminoimidazole Derivatives As New Arginase Inhibitors"*

2007 University of Pennsylvania Medical Center, Pulmonary, Allergy, & Critical Care Division: *"RGS proteins: Design of Specific Antibodies"*

2003 University of Texas Medical Branch: *"Small Molecules Interactions with Proteins Involved in Physiopathology"*

2001 ICS-Unido: *"Rational Design of Topically Active Carbonic Anhydrase Inhibitors"* - Trieste, Italy

Scientific Conferences and Workshops

2023

- Inter-College Advising, Enrollment Management & Student Success - Winter Advising Training Series:
January 2023: Academic Coaching for Advisors: *"Student Champions: Self-Regulated Learning"*

2019

- Drexel Sixth Annual Assessment Conference

- Workshop on assessment: Association for the Assessment of Learning in Higher Education (AALHE)
(selected by the Office of the Provost for a complimentary seat)

- ACS Orlando, FL

2018-2019

- ACS Boston, MA

ACS Exams Institute: **General Chemistry Full Year Standardized Exam (GC 19)**

- ACS New Orleans, LA; ACS Exams Institute Workshops:

"Where can green chemistry concepts be integrated into the general or organic chemistry map?"

"Test items assessment through alignment based on item characteristic: content, complexity, process type and image inclusion."

2017

- ACS Washington, DC

ACS Exams Institute: Full Year GC 19 Standardized Exam

- ACS San Francisco, CA

ACS Exams Institute Workshops:

"Biochemistry map: both aligning items and identifying and editing the statements at levels 3 and 4."

"Development of the 11th Big Idea: Systems Thinking: identifying and editing the statements at levels 1 and 2 as well as beginning to identify statements at level 3."

2016

- ACS Philadelphia, PA

- ACS San Diego, CA

- *Drexel's Fourth Annual Showcase of Teaching* - Drexel Center for Academic Excellence

2015 *Drexel's Third Annual Showcase of Teaching* - Drexel Center for Academic Excellence

2014

- *Drexel's Second Annual Showcase of Teaching* - Drexel Center for Academic Excellence

- *"Role of the Faculty Reviewer Workshop: Helping Students With Personal Statements and Research Proposals"* - Drexel Center for Academic Excellence

- *"Faculty Search Committee Workshop"* - Drexel University

- *"CoAS Teaching and Outreach Consortium"* - Drexel University

- Workshop on writing intensive courses - Drexel Center for Academic Excellence

2013 Widener University

2010 ACS San Francisco, CA

2008 ACS Philadelphia, PA

2004 ACS Anaheim, CA

2003 Florence, Italy

2002 Hannover, Germany

1997 NMR Brasov, Romania

1996 Journées Francophones, Lille, France

Drexel Faculty Learning Communities

- 2022** Drexel Teaching & Learning Center Workshops:
- *"Reconnect, Recharge and Reengage Students by Plugging into Motivation Theory"*
- *"On Your Mark: Alternatives to Grading on a Curve"*
- 2020** Drexel Teaching Academy organized by the Teaching & Learning Center Workshop:
"Remote-Teaching Strategies to Keep Students Engaged"
- 2019** CASTLE & Office of the Faculty Affairs: *"Teaching & Learning in STEM"*
CASTLE Workshops:
- *"Being Human in STEM"*
- *"Process Oriented Guided Inquiry Learning (POGIL) Activities- Part 3"*
- 2018** CASTLE Workshop: *"Process Oriented Guided Inquiry Learning (POGIL) Activities- Part 2"*
- 2017** CASTLE Workshop: *"Process Oriented Guided Inquiry Learning (POGIL) Activities- Part 1"*
- 2016** *"Engaging Students"*
- 2014-2015** Drexel Center for Academic Excellence - *"Engagement and Experiential Learning"*

TRAINING COURSES

2015

- invited by the dean to participate in the first Drexel course for teaching faculty funded by Howard Hughes Medical Institute (HHMI) Sustaining Excellence Award for Science Education: *"Promoting Student Learning in Large STEM Classrooms"*;

- HHMI Journal Club;

2014 *"Using the Scholarship of Teaching and Learning (SoTL) to Improve Student Learning and Success: Five Practical, Research-based Approaches"* - Drexel Center for Academic Excellence

2002 *Rational Drug Design Training Course* - Solvay Pharmaceuticals, Hannover, Germany

2001 *Practical Method Development and Validation for HPLC* - Waters Corporation, Milford, USA

2001 *Combinatorial Chemistry - Molecular Modeling* - scholarship (ICS UNIDO, Trieste, Italy)

OTHER SCHOLARLY ACTIVITIES

2018

Center for the Advancement of STEM Teaching and Learning Excellence (CASTLE):

- **panelist:** CASTLE Summit

- **interview for CASTLE's Audience Response Teaching Method Video** as a CASTLE affiliate:

<https://drexel.edu/castle/resources/teaching-topics/audience-response/>

MEMBERSHIP - PROFESSIONAL SOCIETIES:

- member of the American Chemical Society (ACS)
- member of the ACS Division of Chemical Education
- member of the National Center for Faculty Development & Diversity

Other

- Foreign languages: English (proficient); Italian (good); French (fair)
US legal status: US citizen

SCIENTIFIC PUBLICATIONS

A. Textbooks

G. Campeanu; **M. Ilies**. “Inorganic Chemistry”, Relal Promex Ed., Bucharest, 2002, 155 pages.

B. Book Chapters

2. R. K. K. Sanku, O. O. Karakus, **M. Ilies**, M. A. Ilies, “Inclusion complexes in drug delivery and drug targeting: formation, characterization and biological applications” in “*Targeted Nanosystems for Therapeutic Applications: New Concepts, Dynamic Properties, Efficiency, and Toxicity*”, ACS Books, Washington, DC, **2019** ACS Books, pp. 187-221.

1. **M. Ilies**; A. Scozzafava; C.T. Supuran, “Carbonic Anhydrase Activators” in “*Carbonic Anhydrase: Its Inhibitors and Activators*”, C.T. Supuran, A. Scozzafava, J. Conway Eds., Taylor & Francis/CRC Press, **2004**, pp. 317-352.

C. Articles in Peer-reviewed Journals

25. **M. Ilies**; D.P. Dowling; P.M. Lombardi; D.W. Christianson “Synthesis of a New Trifluoromethylketone Analogue of L-Arginine and Contrasting Inhibitory Activity Against Human Arginase I and Histone Deacetylase 8.” *Bioorg. Med. Chem. Lett.* **2011**, *21*, 5854-5858.

24. **M. Ilies**; L. Di Costanzo; D.P. Dowling; K.J. Thorn; D.W. Christianson “Binding of α,α -Disubstituted Amino Acids to Arginase Suggests New Avenues for Inhibitor Design” *J. Med. Chem.* **2011**, *54*, 5432-5443.

23. **M. Ilies**; L. Di Costanzo; M.L. North; J.A. Scott; D.W. Christianson “2-Aminoimidazole Amino Acids as Inhibitors of the Binuclear Manganese Metalloenzyme Human Arginase I.” *J. Med. Chem.* **2010**, *53*, 4266-4276.

22. D.P. Dowling; **M. Ilies**; K.L. Olszewski; S. Portugal; M. M. Mota; M. Llinas; D.W. Christianson “Crystal Structure of Arginase from Plasmodium falciparum and Implications for L-Arginine Depletion in Malarial Infection.” *Biochemistry* **2010**, *49*, 5600-5608.

21. D.R. Herbert, T. Orekov, A. Roloson, **M. Ilies**, C. Perkins, W. O’Brien, S. Cederbaum, D.W. Christianson, N. Zimmermann, M.E. Rothenberg, F.D. Finkelman. “Arginase I Suppresses IL-12/IL-23p40-Driven Intestinal Inflammation during Acute Schistosomiasis” *J. Immunol.* **2010**, *184*, 6438-6446.

20. L. Di Costanzo; **M. Ilies**; K.J. Thorn; D.W. Christianson. “Inhibition of Human Arginase I by Substrate and Product Analogues” *Arch. Biochem. Biophys.* **2010**, *496*, 101-108.

19. J.H. Kim; L. Bugaj; Y.J. Oh; T. Bivalacqua; S. Ryoo; K.G. Soucy; L. Santhanam; A. Webb; A. Camara; G. Sikka; D. Nyhan; A. Shoukas; **M. Ilies**; D.W. Christianson; H.C. Champion; D.E. Berkowitz. “Arginase Inhibition Restores NOS Coupling and Reverses Endothelial Dysfunction and Vascular Stiffness in Old Rats” *J. Appl. Physiol.* **2009**, *107*, 1249-1257.

18. S. Ryoo; G. Gupta; A. Benjo; H.K. Lim; A. Camara; G. Sikka; H.K. Lim; J. Sohi; L. Santhanam; K. Soucy; E. Taday; E. Baraban; **M. Ilies**; G. Gerstenblith; D. Nyhan; A. Shoukas; D.W. Christianson; N.J. Alp; H.C. Champion; D. Huso; D.E. Berkowitz. “Endothelial Arginase II. A Novel Target for the Treatment of Atherosclerosis” *Circulation Research* **2008**, *102*, 923-932.

17. **M. Ilies**; M.T. Caproiu, "Dynamic ¹H-NMR Conformational Study in a Series of Pyridinium Pyrazoles" *Revista de Chimie* (Bucharest, Romania) **2007**, 58, 442-446.

16. M. Peterca; V. Percec; A.E. Dulcey; S. Nummelin; S. Korey; **M. Ilies**; P.A. Heiney. "Self-assembly, Structural, and Retrostructural Analysis of Dendritic Dipeptide Pores Undergoing Reversible Circular to Elliptical Shape Change" *J. Am. Chem. Soc.* **2006**, 128, 6713-6720.

15. V. Percec; A.E. Dulcey; M. Peterca; **M. Ilies**; S. Nummelin; M.J. Sienkowska; P.A. Heiney. "Principles of Self-assembly of Helical Pores from Dendritic Dipeptides" *Proc. Natl. Acad. Sci.* **2006**, 103, 2518-2523.

14. V. Percec; A.E. Dulcey; M. Peterca; **M. Ilies**; M.J. Sienkowska; P.A. Heiney. "Programming the Internal Structure and Stability of Helical Pores Self-assembled from Dendritic Dipeptides via the Protective Groups of the Peptide" *J. Am. Chem. Soc.* **2005**, 127, 17902-17909.

13. V. Percec; A.E. Dulcey; M. Peterca; **M. Ilies**; J. Ladislaw; B.M. Rosen; U. Edlund; P.A. Heiney. "The Internal Structure of Helical Pores Self-assembled from Dendritic Dipeptides Is Stereochemically Programmed and Allosterically Regulated" *Angew. Chem. Int. Ed.* **2005**, 44, 6516-6521.

12. V. Percec; A.E. Dulcey; M. Peterca; **M. Ilies**; Y. Miura; U. Edlund; P.A. Heiney, "Helical Porous Protein Mimics Self-assembled from Amphiphilic Dendritic dipeptides" *Aust. J. Chem.* **2005**, 58, 472-482.

11. M.S. Soloff; Y.-J. Jeng; **M. Ilies**; S.L. Soloff; M.G. Izban; T.G. Wood; G.V.N. Velagaleti; G.D. Anderson. "Immortalization and Characterization of Human Myometrial Cells from Term-pregnant Patients Using a Telomerase Expression Vector" *Mol. Hum. Reprod.* **2004**, 10, 685-695.

10. X. de Leval; **M. Ilies**; A. Casini; J-M. Dogne; B. Pirotte; A. Scozzafava; E. Masini; F. Mincione; M. Starnotti; C.T. Supuran. "Carbonic Anhydrase Inhibitors: Synthesis and Topical Intraocular Pressure Lowering Effects of Fluorine-containing Inhibitors Devoid of Nucleophilic Character" *J. Med. Chem.* **2004**, 47, 2796-2804.

9. **M. Ilies**; M.D. Banciu; A. Scozzafava; M.A. Ilies; M.T. Caproiu; C.T. Supuran. "Protease Inhibitors: Synthesis of Bacterial Collagenase and Matrix Metalloproteinase Inhibitors Incorporating Arylsulfonylureido and 5-dibenzo-suberenyl/suberyl Moieties" *Bioorg. Med. Chem.* **2003**, 11, 2227-2239.

8. M.A. Ilies; D. Vullo; J. Pastorek; A. Scozzafava; **M. Ilies**; M.T. Caproiu; S. Pastorekova; C.T. Supuran. "Carbonic Anhydrase Inhibitors. Inhibition of Tumor-associated Isozyme IX by Halogenosulfanilamide and Halogeno-aminobenzolamide Derivatives" *J. Med. Chem.* **2003**, 46, 2187-2196.

7. **M. Ilies**; M.D. Banciu; M.A. Ilies; A. Scozzafava; M.T. Caproiu; C.T. Supuran. "Carbonic Anhydrase Activators: Design of High Affinity Isozymes I, II and IV Activators, Incorporating Tri-/Tetrasubstituted- Pyridinium-Azole Moieties" *J. Med. Chem.* **2002**, 45, 504-510.

6. **M. Ilies**; C.T. Supuran; A. Scozzafava; A. Casini; F. Mincione; L. Menabuoni; M.T. Caproiu; M. Maganu; M.D. Banciu. "Carbonic Anhydrase Inhibitors: Sulfonamides Incorporating Furan-, Thiophene- and Pyrrole-carboxamido Groups Possess Strong Topical Intraocular Pressure Lowering Properties as Aqueous Suspensions" *Bioorg. Med. Chem.* **2000**, 8, 2145-2155.

5. M. Cimpeanu; Gh. Campeanu; M. Pele; **M. Ilies**, "Correlation Between Protein, Starch and Amylases Concentrations and the Watering Way for Two Varieties of Greenhouse Tomatoes During Ripening" *Roum. Biotech. Lett.* **1999**, 5, 319-326.

4. M. Cimpeanu; Gh. Campeanu; M. Pele; N. Cepoiu; **M. Ilies**; M.A. Ilies; S. Cimpeanu. "The Watering Way Influence on Phosphorus, Calcium and Potassium Assimilation for Two Varieties of Greenhouse Tomatoes During Ripening". *Roum. Biotech. Lett.* **1999**, 4, 327-333.

3. Gh. Campeanu; M. Pele; M. Cimpeanu; **M. Ilies**; M.A. Ilies. "Evaluation of the Activity of Horseradish Peroxidase and Mushroom Polyphenoloxidase on Some Phenols". *Roum. Biotech. Lett.* **1999**, 4, 319-326.

2. Gh. Campeanu; M. Pele; M. Cimpeanu; **M. Ilies**; G. Luta; E. Manescu; R. Musat. "Mycotoxin Content of Some Wheat and Corn Samples 4-6 Months after Harvesting" *Roum. Biotech. Lett.* **1999**, 4, 65-70.

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