Publication List

The symbol * indicates the corresponding author. Underlined are Friščić group members.


Book chapters

1) Book chapters as an Assistant/Associate/Full Professor at McGill


2) Book chapters as a Research Fellow, University of Cambridge

7. (B) T. Friščić, W. Jones "Development of liquid-assisted grinding (LAG) for the synthesis of hydrogen-bonded and coordination frameworks", in: "Frontiers in Mechanochemistry and Mechanical Alloying", published by International Mechanochemistry Association and National Metalurgy Laboratory, India (2011)

3) Book chapters as a Post-doctoral researcher and as a graduate student


Publications

1) Publications as an Assistant/Associate/Full Professor at McGill

2021


2018


149. (R) C. Mottillo*, T. Friščić "Advances in the solid-state transformations of coordination bonds: from the ball mill to the aging chamber" Moleculares 2017, 22, 144. DOI 10.3390/molecules22010144


2016


144. (M) J. R. Rak, T. Friščić, A. Moore* "One-step, solvent-free mechanosynthesis of silver nanoparticle-infused lignin composites for use as highly active multidrug resistant antibacterial filters" RSC Advances 2016, 6, 58365-58370.

143. (R) O. S. Bushuyev, T. Friščić*, C. J. Barrett "Photo-induced motion of azo dyes in organized media: from single and liquid crystals, to MOFs and machines" CrystEngComm 2016, 18, DOI:10.1039/C6CE01128D


2015


2014


2013


Highlighted in Chemical & Engineering News: http://cen.acs.org/articles/90/49/X-Ray-Vision-Mechanochemical-Mills.html; also highlighted by: the UK Science & Technology Facilities Council, European Synchrotron Research Facility; McGill University; Canadian Chemical News and a number of news outlets https://doi.org/10.1038/nchem.1505


2012


87. (R) A. Delori, T. Friščić, W. Jones* "The role of mecanohexythesis in the development of pharmaceutical materials based on supramolecular designs" CrystEngComm 2012, 14, 2350-2362 (hot article)

2) Publications as a Research Fellow, University of Cambridge

2011


2010


72. (F) D. Cincic, T. Friščić, W. Jones *Experimental and database studies of three-centered halogen bonds with bifurcated acceptors present in molecular crystals, cocrystals and salts* CrystEngComm 2011, 13, 3224-3231 (invited).


2010


67. (C) S. Karki, L. Fábián, T. Friščić and W. Jones* *New solid forms of artemisinin obtained through cocrystallisation* CrystEngComm 2010, 12, 4038-4041. Highlighted on the ACS Crystal Growth and Design network page: https://communities.acs.org/docs/DOC-3808


62. (C) F. C. Strobridge, N. Judaž, T. Friščić* *A stepwise mechanism and the role of the liquid phase in the liquid-assisted grinding synthesis of metal-organic materials* CrystEngComm 2010, 12, 2409-2418 (invited).


2009


3) Publications as a post-doctoral researcher, University of Cambridge

2009


2008


2007


2006


4) Publications as a Ph.D. student, University of Iowa

2006


2005


2004


2003


5) Publications as an undergraduate student, University of Zagreb

1998-2002


Invited, Plenary and Keynote Lectures at Departments, Conferences, Symposia and Industrial Sites
Presentations given

2021
192. T. Friščić, "It's not easy being green – a survival guide for the aspiring milling mechanochemist" Invited Lecture at the EU COST Action Online Training School "Mechanochemistry: From supramolecular to covalent bonds – synthesis and structural characterization" (webcasted from Lisbon, 22-25 Mar 2021)
191. T. Friščić, "Synthesis without bulk solvents: catalytic, greener and more efficient" Invited Lecture at the Solid-state Pharmaceutical Centre (SSPC) Greener Pharmaceutical Manufacturing Event (online, 26 Mar 2021)
190. T. Friščić, "Green Chemistry via the Solid State: Sky is the Limit" Invited Lecture at the University of Birmingham School of Chemistry (online, 19 Feb 2021)
189. T. Friščić, "Emergence of Medicinal Mechanochemistry: from DNA to Co-Crystals and Back" Invited Lecture at the EU COST Action Workshop "Mechanochemistry Meets Industry" (online, 17-18 Feb 2021)
188. T. Friščić, "Mechanochemistry: chemical and materials synthesis without bulk solvents" Invited Lecture at the Los Alamos National Laboratory (online, 14 Jan 2021)

2020
187. T. Friščić, "Green Chemistry via the Solid State: Sky is the Limit" Open Science Podcast (held online, 20 Nov 2020)
184. T. Friščić, "Mechanochemistry: Chemists' Re-discovery of the Book of Stones" Online Invited Lecture by the NSF Center for Mechanical Control of Chemistry (CMCC, 15 Oct 2020) (Inaugural Lecture)
183. T. Friščić, "Green Chemistry via the Solid State: Sky is the Limit" Invited Talk at the Department of Chemistry, University of Ottawa (held online, 16 Sep 2020)
182. T. Friščić, "From Mechanochemistry to MOFs: Understanding the Reactivity of Solids" Invited Talk at the Department of Chemistry and Polymer Science, Stellenbosch University (held online, 10 Jul 2020)
181. T. Friščić, "Green Chemistry via the Solid State: Sky is the Limit" Invited Talk at the Annual General Meeting of the Montreal Chapter of the Canadian Institute for Chemistry (held online, 18 Jun 2020)
180. T. Friščić, "Re-discovering the Stones of Chemistry: a Cornerstone for New, Cleaner Synthesis of Molecules and Materials" Invited Talk to the German Chemical Society, GDCh (held online, 26 May 2020)
179. T. Friščić, "Reactivity of Solids as a Cornerstone for New, Cleaner Chemistry and Materials Science" Invited Talk at the Department of Chemistry, University of Texas, Houston (held online, 21 Apr 2020)
177. T. Friščić, "Kemija na suho" ("Dry Chemistry"). Keynote talk at the annual dinner of the AMCA Québec (Montreal, 4 Feb 2020)

2019
176. T. Friščić, "Reactivity of Solids as a Cornerstone for New, Cleaner Chemistry and Materials Science" Invited Lecture at the Department of Chemistry, University of Bologna (Bologna, Italy, 10 Dec 2019)
170. T. Friščić, I. Huskic "The emergent relationship between solvent-free chemistry, crystal engineering and mineralogy", Invited Talk at the 2019 Annual Meeting of the American Crystallographic Association (Covington, KY, USA, 23 July 2019)
169. T. Friščić, "Mechanochemistry with additives: From improved synthesis to manufacturing advanced materials from the simplest precursors", Invited Talk at the 23rd Annual Green Chemistry & Engineering Conference and 9th International Conference on Green and Sustainable Chemistry (Reston, VA, USA, 11 June 2019)
167. T. Friščić, "Metal-organic frameworks: from mechanochemistry to minerals", Award Lecture at the 102nd Canadian Chemistry Conference and Exhibition (Quebec City, Canada, 5 June 2019)
Mechanochemistry Opens the Door to Cleaner, Safer and More Exciting Chemistry via Simplicity and Minimalistic Design

Invited Talk at the Department of Chemistry, Montpellier University, (Montpellier, France, 14 May 2019)

“Simplicity and Minimalistic Design for Cleaner, Safer and More Exciting Chemistry”, Steacie Prize in Natural Science Lecture, (McGill University, Montreal, 24 April 2019)

“Mechanochemistry and Green Chemistry – Thinking about Chemistry in a Different Way”, Invited Talk at the 26th Annual Meeting of Croatian Chemists and Chemical Engineers, (Šibenik, Croatia, 9-12 April 2019)

“Thousand ways of monitoring mechanochemical reactions” Invited Lecture at the ACS Spring 2019 National Meeting, CATL Division, (Orlando, FL, USA, 31 March 2019)

“Understanding the thermodynamics and energetic properties of synthetic and natural metal-organic frameworks” Invited Lecture at the ACS Spring 2019 National Meeting, PHYS Division, (Orlando, FL, USA, 1 April 2019)

Keynote Lecture at the Bravo 2019 event honoring award recipient at McGill University, (Montreal, 21 March 2019)

“Metal-Orgaorganic Frameworks: Mechanochemistry, Materials and Minerals”, Plenary lecture at the 31st German Zeolite Meeting, (Dresden, Germany, 6-8 March 2019)

2018


“Chemistry 2.0”, Plenary Talk at the 21st Chemistry and Biochemistry Graduate Research Conference (CBGRC), Concordia University (Montreal, QC, 9 November 2018)


“Understanding of Metal-Organic Frameworks through Mechanochemistry: From Experiment to Theory”, Invited Lecture at the 2018 Annual Meeting of the American Crystallographic Association (Toronto, ON, 20-24 July 2018)


“Rediscovering the Chemistry of Stones: solid-state chemistry for cleaner, more efficient synthesis of molecules and materials”, Invited Guest Lecture at the 2018 Annual Meeting of the British Association for Crystal Growth (BACG, Limerick, Ireland, 20-21 June 2018)

“Mechanochemistry @MOSSCS: from MOFs to Mechanisms” Plenary Lecture at the 28th Midwest Organic Solid-State Chemistry Symposium (MOSSCS XXVIII) (St. Louis, MO, USA, 8-9 June 2018)

“Understanding the mechanochemical assembly of cocrysalts and metal-organic frameworks”, Invited Lecture at the 101st Canadian Chemistry Conference and Exhibition (Edmonton, AB, 27-31 May 2018)

“Solvent-Free Chemistry or What’s a Chemist Without a Beverage?”, Pint of Science Lecture Series (Montreal, 14 May 2018)


“Green Chemistry 2.0”, Cutting Edge Lecture in Science Series (Redpath Museum, Montreal, 8 March 2018)

“Mechanochemistry: chemical and materials synthesis without bulk solvents”, Invited Lecture at the University of Ljubljana Doctoral Studies Program (Ljubljana, Slovenia, 30 January 2018)

2017

“Towards Efficient and Sustainable Synthesis through Solid-state Chemistry”, Invited Lecture at the 4th Canada-Japan Symposium on Coordination Chemistry (Fukuoka/Miyazaki, Japan, 27-30 November 2017)

“How I Invented Greener Solvent-free Chemical Reactions”, Invited Lecture at the Freaky Fridays Lecture Series, McGill University (Montreal, 24 November 2017)


“Chemistry 2.0: Developing a Chemical System that Does Not Ignore Caring for the Environment”, STARS Lecture Series, McGill University (Montreal, 13 September 2017)

“Towards a More Efficient, Cleaner Synthesis of Molecules and Materials via Solvent-free Reactivity”, Invited Lecture at the Department of Chemistry, University of Cincinnati (Cincinnati, OH, USA, 6 October 2017)

“Chemistry 2.0: How Solid-State Chemistry Enables a More Efficient and Environmentally-Friendly System of Synthesis”, Invited Lecture at the Department of Chemistry, Clark University (Postdam, NY, USA, 15 September 2017)

“Kemija 2.0: drugačija, čišća i efikasnija sinteza bez otapala”, Inaugural lecture of a new chemistry seminar series of the Croatian Academy of Arts and Sciences (Zagreb, Croatia, 8 September 2017)

“Chemistry 2.0: developing a new, solvent-free system of chemical synthesis based on mechanochemistry”, Invited Lecture at the 9th International Conference on Mechanocchemistry and Mechanical Alloying (INCOME2017) (Košice, Slovakia, 3-7 September 2017)

“Mechanochemistry: a re-discovery of solid state in synthetic chemistry”, Invited Lecture at the Indian Institute of Chemical Technology Hyderabad (Hyderabad, India, 28 August 2017)

133. T. Friščić “Assembly and dichroism of a four-component halogen-bonded metal-organic cocystal salt solvate involving dicyanodinitrate(1) acceptors”, Invited Lecture at the Faraday Discussions meeting on “Halogen Bonding in Supramolecular and Solid-State Chemistry” (University of Ottawa, Ottawa, ON, 10-12 July 2017)


131. T. Friščić “Solid-State Chemistry for Cleaner and More Efficient Materials Synthesis and Discovery”, Invited Lecture at the 100th Canadian Chemistry Conference and Exhibition, MT3 Symposium (Toronto, ON, 28 May – 1 June 2017)

130. T. Friščić “New Techniques for the Efficient Synthesis and Discovery of Microporous Metal-Organic Frameworks”, Invited Lecture at the 100th Canadian Chemistry Conference and Exhibition, MT5 Symposium (Toronto, ON, 28 May – 1 June 2017)

129. T. Friščić “New and Versatile Mechanochemical Routes to Materials and Molecules”, Invited Lecture at the 100th Canadian Chemistry Conference and Exhibition, IN6 Symposium (Toronto, ON, 28 May – 1 June 2017)


125. T. Friščić “Chemistry 2.0: A Different System of Chemical & Materials Synthesis”, Invited Lecture at the Department of Chemistry, Simon Fraser University (Burnaby, BC, 7 March 2017)


123. T. Friščić “Towards Chemistry 2.0: Solid State as the enabling Medium for Making Molecules and Materials”, Alumni Lecture at the Department of Chemistry, University of Iowa (Iowa City, 17 February 2017)

122. T. Friščić “Efficient discovery and synthesis of solid forms through mechanochemistry and accelerated aging”, invited Lecture for the Formulations Division at GenenTech headquarters (San Francisco, USA, 13 February 2017)

121. T. Friščić “Mechanochemistry: a system of chemical synthesis directed towards efficiency and sustainability”, invited Lecture for the Medicinal Chemistry Division at GenenTech headquarters (San Francisco, USA, 13 February 2017)

2016

120. T. Friščić “Mechanochemistry: Synthesis of Molecules and Materials Re-discovered”, invited lecture at the Department of Chemistry, National University of Singapore (Singapore, 12 December 2016)

119. T. Friščić “A Renaisance of Solid-State Chemistry Across Chemical Synthesis” invited lecture at the 2016 Asian Crystallographic Association (AsCA) meeting (Hanoi, Vietnam, 4-7/12/2016)

118. T. Friščić “Chemistry of Stones: Development of Solid-state Routes to Molecules and Materials”, invited lecture at the Department of Chemistry, Dalhousie University (Halifax, 7 October 2016).

117. T. Friščić “The Emergence of Medicinal Mechanochemistry”, keynote lecture at the 30th European Crystallographic Meeting, ECM-30 (Basel, Switzerland, 29 August 2016).


114. T. Friščić “New Opportunities for Photo- and Thermo-Mechanical Materials are Crystal Clear”, invited lecture at the Telluride Science Research Center Workshop on Energy and Movement in Coherent Chemical Systems (Telluride, CO, 4-8 July 2016).


111. T. Friščić “Green Chemistry Guide to Selecting the Right Solvent for Your Reaction”, lecture at the NSERC CREATE in Green Chemistry Summer School (McGill University, Montreal, 9-11 May 2016).


108. T. Friščić, "Rehabilitating the solid state as a reaction medium - towards a new, green system of chemical synthesis" Invited Lecture at Department of Chemistry, Tulane University (Tulane, LA, USA, 4 April 2016).


103. T. Friščić, “Towards a New System of Chemical Synthesis: Solid-State Chemistry for New Materials and Reactivity” Invited Lecture at the Department of Chemistry, University of Texas at Dallas (Dallas, TX, 12 February 2016).
2014 ChemComm Emerging Investigator Lecture: Rehabilitating the solid state as a reaction medium. (Mechanochemistry: Resolving the Challenges of Bulk Synthesis of Metal Solid, Symposium #93 on “Recent Discoveries in the Chemistry of Bismuth and Related Elements: the Green Alternative” (Honolulu, HI, USA, 15-20 December 2015).

2015

94. T. Friščić “Connections Between Biominalization and Metal-organic Frameworks (MOFs)”, Invited Lecture at the RSC New Journal of Chemistry Symposium (Department of Chemistry, McGill University, 3 June 2015).
91. T. Friščić “Milling: from mechanical processing to clean, environmentally-friendly and economically attractive synthesis” invited lecture at the Nestec Research Center (Lausanne, Switzerland, 29 Apr 2015).
90. T. Friščić “Outlines of Mechanochemistry: From a New Synthetic Environment to the Discovery of New Materials and Reactivity” invited lecture at the University College London, Department of Chemistry (part of the ChemComm Emerging Investigator Award Lecture Series, London, UK, 17 Apr 2015).
89. T. Friščić “Mechanochemistry: from environmentally-friendly synthesis to the discovery of new materials and reactivity” invited lecture at the University of Ottawa, Department of Chemistry (part of the ChemComm Emerging Investigator Award Lecture Series, Ottawa, ON, 25 Feb 2015).
88. T. Friščić “A (New) Role for Solids in Chemical Synthesis: Mechanochemical and Solvent-free Routes to Molecules and Materials” invited lecture at the University of Cardiff, School of Chemistry (Cardiff, UK, 20 Jan 2015).

2014

87. T. Friščić “Solid-state self-assembly: from minerals to metal-organic frameworks” invited lecture at the ACS Midwest Regional Meeting, University of Missouri (Columbia, MO, USA, 14 Nov 2014).
86. T. Friščić "Re-discovering the solid state as a versatile medium for rapid, clean and energy-efficient synthesis" Invited Lecture at the 8th Singapore International Chemistry Conference (SIICC-8) (Singapore, 14-17 Dec 2014).
85. T. Friščić "Transformation of simple inorganic feedstocks into functional metal-organic structures with minimum input of energy and solvent" invited lecture at the International Symposium on Nanostructured Functional Materials (NanoFunMat), (Warsaw, Poland, 15-18 Jun 2014).
84. T. Friščić "Developing the solid state for rapid, clean and energy-efficient synthesis: from small molecules to extended materials" invited lecture at the Department of Chemistry, Purdue University (West Lafayette, USA, 2 Dec 2014).
83. T. Friščić "A (new) role for solid-state reactivity in making molecules and materials" invited lecture at the Department of Chemistry, Vanderbilt University (Nashville, USA, 3 Nov 2014).
81. T. Friščić “Cleaner and Greener Synthesis of Molecules and Materials Inspired by Concepts of Mechanochemistry and Biogeochemistry” invited lecture at the Department of Chemistry, University of Victoria (Victoria, BC, 16 Oct 2014).
80. T. Friščić “Solvent-free and low-energy assembly of metal-organic frameworks” Invited Lecture at the MOF2014 Conference (Kobe, Japan, 28 Sep-1 Oct 2014).
78. T. Friščić “Rapid and clean synthesis leads to discovery of new framework structures and assessment of carbon dioxide sensitivity”, Invited Lecture at the international symposium “Supramolecular Coordination Chemistry” at the 97th Canadian Chemistry Conference and Exhibition (Vancouver, BC, 1-5 June 2014).


74. T. Friščić "Innovations in solid-state chemistry for new and greener synthesis" Invited Lecture at the 5th Annual Meeting of the Centre for Green Chemistry and Catalysis (Montreal, QC, 9 May 2014).

73. T. Friščić "Thermal analysis of modern molecular materials: pharmaceutical cocrystals, photo-mechanical and thermostabilent (jumping) crystals" Plenary Lecture at the 24th Canadian Thermal Analysis Society Annual Workshop and Exhibition (Toronto, 6-7 May 2014)

72. T. Friščić "Mechanochemical activity at McGill University" invited lecture at the IMERYS Centre (Sanderville, GA, USA, 17 April 2014).

71. T. Friščić "Cleaner, faster and more efficient synthesis using solid-state chemistry and mechanochemistry" invited lecture at the Environmental Chemistry (ENVR) Symposium on "Green Chemistry and the Environment", 247th National ACS Meeting (Dallas, TX, USA, 16-20 March 2014).

70. T. Friščić "Mechanochemistry and accelerated aging: Interconversion of inorganic and metal-organic structures with minimum input of energy and solvent" invited lecture at the Inorganic Chemistry (INOR) Symposium on "Inorganic Supramolecular Chemistry", 247th National ACS Meeting (Dallas, TX, USA, 16-20 March 2014).

2013

69. T. Friščić "Novi, jednostavniji i čišći pristup kemijskoj sintezi (New, simpler and cleaner approaches to chemical synthesis)" Invited E-lecture at the first E-Symposium of the Croatian Chemical Society, available at: http://www.e-kemija.com/ (introduced in Zagreb, Croatia, on 29 October 2013)

68. T. Friščić "Mechanochemistry: from solvent-free, low-energy synthesis to (photo- or thermo-)chemically-driven mechanical motion" invited lecture at the University of North Dakota Department of Chemistry (Grand Forks, ND, USA, 15 November 2013).

67. T. Friščić "Mechanochemistry: from solvent-free, low-energy synthesis to (photo- or thermo-)chemically-driven mechanical motion" invited lecture at the North Dakota State University Department of Chemistry and Biochemistry (Fargo, ND, USA, 14 November 2013).

66. T. Friščić "Low-energy and -solvent transformations using milling and aging: mechanisms and opportunities in organic, supramolecular and materials synthesis" invited lecture at the 2nd Canada-Japan Joint Symposium on Coordination Chemistry (Okinawa, Japan, 1-3 November 2013).


64. T. Friščić "Mechanochemistry: from solvent-free and low-energy synthesis to photomechanical effect" invited lecture at the Xerox Research Centre of Canada (XRCC) (Mississauga, ON, 18 October 2013)

63. T. Friščić "Focusing on self-assembly: minimising the input of energy and solvent in the synthesis of metal-organic architectures" invited lecture at the 14th International Seminar on Inclusion Compounds (ISIC 14), Heriot-Watt University (Edinburgh, UK, 18-23 August 2013).


60. T. Friščić "Solid-state transformations as the foundation for a low-energy and low-solvent system of chemical synthesis" invited lecture at the Symposium on Recent Developments in Solvent-Free Reactions, 246th National ACS Meeting (Indianapolis, IN, USA, 8-12 September 2013).

59. T. Friščić "Solid-state reactivity as the foundation for a system of cleaner and more efficient synthesis of molecules and materials" oral presentation at the Inorganic Chemistry Laboratory, Oxford University, personal invitation from A. Goodwin (Oxford, UK, 7 August 2013).

58. T. Friščić, "Mechanochemistry for low-solvent and energy-efficient transformations: from supramolecular chemistry to organic synthesis and porous metal-organic frameworks", Invited lecture at Canétique Electrocatalyse, Inc., Varennes, Quebec, Canada (14 May 2013)

57. T. Friščić, C. Mottillo, F. Qi, Y. Lu "La chimie pour les paresseux: Comment faire des molecules et materiaux a base de material energy and sans solvent", Invited talk at 81st du Congrès de l'Acfas, Quebec City, Quebec, Canada (6 May 2013)

56. T. Friščić, "Mechanochemistry and solvent-free synthesis aid and abet supramolecular chemistry - Proširenie supramolekulske kemije uz pomoć mehanokemije i kemije bez otapala", Invited lecture at the XXIII Croatian Meeting of Chemists and Chemical Engineers, Osijek, Croatia (22 April 2013)

55. T. Friščić, "Mechanochemistry for low-solvent and energy-efficient transformations: from supramolecular chemistry to organic synthesis and porous metal-organic frameworks", Invited lecture at the Exxon Mobile Corporate Strategic Research centre, Annandale, New Jersey, USA (15 March 2013)

54. T. Friščić, "Cleaner Processes through Solvent-free Chemistry and Mechanochemistry", Invited speaker at the CABIomass-I meeting on Catalysis Applied to Biomass, Compiegne, France (12 March 2013)

53. T. Friščić, "Mechanochemistry and catalytic solid-state transformations as low-energy and solvent-free routes to chemical and materials synthesis", Invited lecture at the Canadian Light Source, Saskatoon, Canada (20 February 2013)

52. T. Friščić, "Accelerating mechanochemical and solid-state reactions: New strategies for efficient, low-energy and solvent-free synthesis of organic molecules and metal-organic materials", Seminar speaker at the Department of Chemistry and Biochemistry, University of Windsor, Windsor, Canada (25 January 2013)

50. T. Friščić, “In situ monitoring of mechnochemical syntheses of porous frameworks in a mill”, plenary speaker at the SNIC-RSC Joint Symposium on Inorganic Chemistry, organized by the RSC Dalton Division, Singapore (7 January 2013)

2012

49. T. Friščić, "In situ monitoring of mechnochemical syntheses of porous frameworks in a mill", keynote speaker at the 13th European Powder Diffraction Conference (EPDIC-13), Grenoble, France (30 October 2012)

48. T. Friščić, "Self-assembly of metal-organic materials from metal oxides", invited lecture at the Supramolecular Chemistry Symposium, 30th Congress Latinoamericano de Química (CLAQ 2012), Cancun, Mexico (28 October 2012)

47. T. Friščić, "New low-energy and low-solvent approaches to chemical synthesis" invited seminar lecture at Georgetown University, Department of Chemistry, Washington D.C., USA (25 October 2012)


44. T. Friščić "Milling mechnochemistry and accelerated aging: strategies for low-solvent and low-energy synthesis of metal-organic materials", plenary lecture at the RSC Dalton 2012 meeting, Warwick University, Department of Chemistry, Warwick, UK. Part of the RSC Harrison Meldola Prize and Lectureship (4 April 2012)

43. T. Friščić "Lazy man's chemistry - low energy approaches to chemical and materials synthesis", invited lecture at the Queen's University of Belfast, Department of Chemistry, Belfast, UK. Part of the RSC Harrison Meldola Prize and Lectureship (3 April 2012)

42. T. Friščić "Lazy man's chemistry: solvent-free and low-energy routes to metal-organic materials", invited lecture at the University of Southampton, Department of Chemistry, Southampton, UK. Part of the RSC Harrison Meldola Prize and Lectureship (30 March 2012)

41. T. Friščić "Solid state synthesis of molecular materials", invited lecture for the CSACS (Centre for Self-Assembled Chemical Structures) CHEM 634 course, McGill University, Department of Chemistry, Montréal, Quebéc, Canada (13 January 2012)

2011

39. T. Friščić “Mechanochemistry: developing rapid and general routes for the green and low-energy synthesis of molecules and materials”, invited lecture at the Concordia University, Department of Chemistry and Biochemistry, Montréal, Quebéc, Canada (28 October 2011)

38. T. Friščić “How to be efficient and environmentally-friendly at the same time: solid-state chemistry of materials and molecules”, invited lecture at the Marianopolis College CEGEP Chemistry Club, Montréal, Quebéc, Canada (18 October 2011)

37. T. Friščić "Supramolecular concepts in mechanochemical synthesis” invited lecture at the Joint Midwest/Great Lakes Regional ACS Meeting, St. Louis, USA (20 October 2011)

36. T. Friščić "Ion- and liquid-assisted grinding: MOFs, metalloids and mechanisms" invited lecture at the 2nd International Symposium on Mechanochemistry and Solvent-free synthesis, Belfast, UK (18 August 2011)

2) Invited Lectures as a Research Fellow, University of Cambridge

2011

35. T. Friščić “How to be efficient and environmentally-friendly at the same time: solid-state routes to materials and molecules” Plenary Lecture at the 20th Croatian-Slovenian Crystallographic Meeting, Baška, Croatia (16 June 2011)

34. T. Friščić “Clean, rapid and energy-efficient synthesis of materials and molecules through mechanochemical transformations” Plenary Lecture at the Department of Chemistry, Oregon State University, Corvallis, Oregon, USA (21 February 2011)

33. T. Friščić “Solid-state transformations: An overlooked path to clean and efficient synthesis of materials and molecules” Invited lecture at the Department of Chemistry and Biochemistry, Utah State University, Logan, Utah, USA (10 February 2011)

32. T. Friščić “Energy- and solvent-efficient synthesis of materials and molecules using solid-state transformations” Invited lecture at the Max-Planck-Institute for Iron Research GmbH, Duesseldorf, Germany (1 February 2011)

31. T. Friščić “Clean synthesis of materials and molecules through mechanochemical transformations” Invited lecture at the Max-Planck Institute for Solid State Research, Stuttgart, Germany (18 January 2011)

30. T. Friščić “Solid-state transformations: An overlooked path to clean and efficient synthesis of materials and molecules” Invited lecture at the Department of Chemistry, McGill University, Montreal, Quebéc, Canada (10 January 2011)

2010


28. T. Friščić "Solid-state transformations: An overlooked path to clean and efficient synthesis of materials and molecules" Invited lecture at the Max-Planck Institute for Solid State Research, Stuttgart, Germany (16 September 2010)

27. T. Friščić "Halogen bonds: mechanochemistry, unusual acceptors and metal-organic materials" plenary lecture at the 26th European Crystallographic Meeting, Darmstadt, Germany (1 September 2010)

2009

17
26. T. Friščić "Towards synthetic coordination chemistry that is completely independent of solution and solvents" plenary lecture at the 1st RSC Symposium on Mechanoschemistry and Solvent-free synthesis, Belfast, UK (6 November 2009)
25. T. Friščić "Ion- and liquid-assisted grinding (IGHL): using templating effects to accelerate and direct mechanosynthesis" lecture at the RSC Macrocycles and Supramolecular Chemistry Symposium, Cambridge, UK (15 December 2009)
24. T. Friščić "Crystal Engineering and Molecular Recognition: New Aspects of Mechanoschemistry" plenary lecture at the Midwest Regional Meeting of the American Chemical Society, Iowa, USA (21-24 October 2009)
23. T. Friščić "Mechanochemical assembly of molecular and metal-organic materials" invited lecture at the Inorganic seminar series, Michigan State University, East Lansing, Michigan, USA (19 October 2009)
22. T. Friščić "Mechanochemical construction of and inclusion in organic and metal-organic frameworks" Plenary Lecture at the 4th Bologna convention on crystal forms, Bologna, Italy (4-6 June 2009)
21. T. Friščić "Mechanochemical co-crystallisation: A Primitive but Efficient Way to Screen for Molecular Recognition and Supramolecular Complexity", invited talk at the Department of Chemistry, Materials, Chemical Engineering "Giulio Natta", Polytechnic of Milan, Milano, Italy (3 June 2009)
20. T. Friščić "Molecular assembly through mechanosynthesis: from cocrystals and inclusion compounds to coordination polymers and frameworks" plenary lecture at the Control and Prediction of the Organic Solid State (CPOSS) open day meeting, University College London, London, UK (31 March 2009)
19. T. Friščić "Increasing solubility by crystal engineering and co-crystal formulation", plenary lecture at the APSGB meeting on Poorly Soluble Drugs, Aston University, Birmingham, UK (15 April 2009)

2008
18. T. Friščić "What can cocrystals and mechanosynthesis teach us on molecular recognition?" invited lecture at the Rudjer Boskovic Institute, Zagreb, Croatia (August 2008).

3) Invited Lectures as a Post-doctoral Researcher, University of Cambridge
2008
15. T. Friščić "Mechanosynthesis of multicomponent solids – a means of exploring intermolecular interactions" invited lecture at the 3rd International workshop Innovation in Crystal Polymorphism, Bologna, Italy (February 2008)

2006-2007
14. T. Friščić "Exploring the reactivity of cocrystals using liquid-assisted grinding" invited lecture at the Department of Chemistry, University College London, London, United Kingdom (November 2007)
13. T. Friščić "Cocrystal Design" plenary lecture at the "Changing the Materials’ Landscape" Science Symposium, Sandwich, United Kingdom (November 2007)
12. T. Friščić "Constructing Molecules within Organic Crystals" invited lecture for the Zagreb Summer School of Chemistry, Zagreb, Croatia (July 2007)
11. T. Friščić "The Golden Apple", lecture on supramolecular and solid-state chemistry for the Zagreb Summer School of Chemistry, Zagreb, Croatia (July 2007)
10. T. Friščić "Testing pharmaceutical cocrystals via grinding: synthesis, screening, reactivity and issues of design" lecture at the Pfizer Global R&D, Sandwich, UK (July 2007)
9. T. Friščić "Grinding as a Tool of Supramolecular Synthesis", invited lecture at the Department of Chemistry, Durham University, Durham, UK (May 2007)
8. T. Friščić "Mechanochemical Synthesis of Pharmaceutical Cocrystals" invited lecture at the College of Pharmacy, University of Michigan, Ann Arbor, Michigan, USA (March 2007)
7. T. Friščić "Supramolecular Synthesis in the Solid State: Potential and Strategies" invited lecture at the School of Pharmacy, De Montfort University, Leicester, UK (March 2007)

4) Invited Lectures as a Graduate Student, University of Iowa
2005
5. Friščić, T. "Graduate Studies in the U.S.A." oral presentation in the organization of theStudent Division of the Croatian Chemical Society, Zagreb, Croatia (September 2005)

2004
3. Friščić, T.; MacGillivray, L. R., "Template-controlled Synthesis of Molecular Targets in Crystals", invited oral presentation at the Luther College Chemistry Department Chemistry Seminar Series, Decorah, Iowa, USA (November 2004).
2. Friščić, T.; MacGillivray, L. R. "Synthesis of Target Molecules in the Solid State" invited talk at the Laboratory for Organic Chemistry at the University of Zagreb Faculty of Science Chemistry Department, Zagreb, Croatia (September 2004).

### Regular oral conference presentations

1) **Oral Conference Presentations as an Assistant Professor, McGill University**

2020
46. T. Friščić, "Supramolecular chemistry and photochemistry of halogen-bonded azobenzene solids" Live Talk at the 4th International Symposium on Halogen Bonding (online, Stellenbosch University, Stellenbosch, South Africa, 2-5 Nov 2020)

2016

2015
44. T. Friščić, "Mechanochemistry as an excellent and clean approach for chemical synthesis and discovery" Lecture at the 2015 PacificChem Meeting, Symposium #322 on "Mechanochemistry and Solvent-free Synthesis" (Honolulu, HI, USA, 15-20 December 2015).

2013
42. T. Friščić "Solid-state reactivity by milling and aging as the basis for a system of cleaner and more efficient synthesis of molecules and materials" oral presentation at the 2013 Annual Meeting of the American Crystallographic Association (Honolulu, Hawaii, USA, 20-24 July 2013). Organizer of the microsymposium "Contemporary Crystal Engineering"
41. T. Friščić "Mechanochemistry: towards a new and solvent-free system of chemical synthesis" oral presentation at the 96th Canadian Chemistry Conference and Exhibition, (Quebec City, 28 May 2013).

2012
40. T. Friščić, C. Mottillo, F. Qi "Direct transformation of metal oxides into metal-organic materials using mechanochemical milling and "accelerated aging" techniques", oral contribution at the 51st Annual Conference of Metallurgists, Niagara Falls, Canada (Oct 3, 2012)
37. T. Friščić, "Solvent-free and low-energy approaches to functional metal-organic materials", oral contribution at the Gas Capture Materials symposium at the 95th Canadian Chemistry Conference and Exhibition, Calgary, Canada (23 May 2012)

2011
36. T. Friščić "Clean, rapid and energy-efficient synthesis of materials and molecules through mechanochemical transformations" oral presentation at the Euromat 2011, European Congress and Exhibition on Advanced Materials and Processes, Montpellier, France, (12 September 2011).

2) **Oral Conference Presentations as a Research Fellow, University of Cambridge**

2011
35. T. Friščić "Mechanochemical synthesis: An overlooked path to clean and efficient synthesis of materials and molecules" oral presentation at the Spring 2011 ACS National Meeting, Anaheim, California, USA (27 March 2011).

2009
34. T. Friščić and L. Fábián "Clean and diversity-oriented synthesis of metal-organic materials by grinding" oral presentation at the Spring 2009 ACS National Meeting, Salt Lake City, Utah, USA (23 March 2009).

3) **Oral Conference Contributions as a Post-doctoral Researcher, University of Cambridge**

2008

2007
31. T. Friščić "Mechanochemical approaches for the construction and discovery of API cocrystals" lecture at the 9th International Workshop on Physical Characterisation of Pharmaceutical Solids, Natick, Boston, Massachusetts, USA (June 2007)

2006
29. Friščić, T. "Liquid-assisted grinding: a general tool to study and conduct supramolecular synthesis in the solid state" lecture to the Pfizer Institute for Pharmaceutical Materials Science, Cambridge, UK (October 2006)

4) Oral Conference Contributions as a Graduate Student, University of Iowa

2005
23. Friščić, T.; MacGillivray, L. R., "Reversing the Code of Template-directed Solid-state Synthesis", oral presentation at the 14th Croatian-Slovenian Crystallographic Meeting, Vrsar, Croatia (June 2005).

2004
20. Friščić, T.; MacGillivray, L. R., "Unsymmetrical Molecular Ladders" oral presentation at the 13th Biocatalysis and Bioprocessing Conference in Iowa City, Iowa, USA (October 2004).

2003

2002

5) Oral Conference Contributions as Undergraduate Student, University of Zagreb
Poster presentations

1) Poster Presentations since joining McGill University

2019

2018

2012
35. T. Friščić "Solvent-free and low-energy assembly of metal-organic materials" poster contribution at the 2nd Gordon Research Conference on Crystal Engineering, Waterville, MA (10-15 June 2012)

2) Poster Presentations as a Research Fellow, University of Cambridge

2011
34. T. Friščić "Rapid, clean and energy-efficient laboratory synthesis of materials and molecules through mechanochemistry" poster contribution at the 15th Annual Green Chemistry & Engineering Conference and 5th International Conference on Green & Sustainable Chemistry, Washington D.C., USA (22 June 2011)

2010
33. T. Friščić "Solid-state mechanosynthesis: An overlooked path to clean and efficient synthesis of materials and molecules" poster contribution at the 2010 Winter School on Chemistry and Physics of Materials, Bangalore, India (4-11 December 2010)
32. T. Friščić "Molecular recognition and catalytic effects in mechanochemistry" poster contribution at the 1st Gordon Research Conference on Crystal Engineering, Waterville, NH, USA (6-11 June 2010)
31. T. Friščić and W. Jones "Solid-state mechanochemical assembly of pharmaceutical solid forms" poster contribution at the 1st Gordon Research Conference on Crystal Engineering, Waterville, NH, USA (6-11 June 2010)

2009
29. T. Friščić and N. Judaš "The stepwise mechanism and templating effects in the mechanosynthesis of coordination polymer inclusion compounds and porous MOFs", poster contribution at the 42nd IUPAC Congress, Glasgow, UK (4 August 2009)
27. T. Friščić and N. Judaš "Solvatochroomism in a mechanochemical reaction: synthesis of Cu(II) coordination polymers by liquid-assisted grinding", poster contribution at the 21st Croatian Meeting of Chemists and Chemical Engineers, Split, Croatia (19-22 April 2009)
24. J. Galcera, T. Friščić, E. Molins, W. Jones "Isostructural organic salt host architecture that allows control over shape and decoration of inclusion cavities" invited poster at the Control and Prediction of the Organic Solid State (CPOSS) open day meeting, University College London, London, UK (March 2009)

2008

3) Poster Presentations as a Post-doctoral Researcher, University of Cambridge

2007
22. T. Friščić, D. Cínčić, W. Jones "Supramolecular synthesis by grinding: molecular inclusion and halogen bonds". Poster contribution at the UK RSC Macro cyclic and Supramolecular Chemistry Group Meeting, University of Manchester, Manchester, United Kingdom (December 2007)

4) Poster Presentations as a Graduate Student, University of Iowa

2005

2004

2003

5) Poster Presentations as an Undergraduate Student, University of Zagreb

1995-2001
11. T. Lenac, T. Friščić and E. Meštrović, "The use of CSD for investigation of crystal structures of solvates", poster presentation at the XVIIth Croatian Meeting of Chemists and Chemical Engineers, Osijek, Croatia (June 2001).
10. T. Friščić and Branko Kaitner, "Chloroform adduct of [N,N'-butylenedibis(o-hydroxy-acetophenoniminato)]-copper(II)", poster presentation at the XVIIth Croatian Meeting of Chemists and Chemical Engineers, Osijek, Croatia (June 2001).
5. T. Friščić, E. Meštrović, B. Kaitner, "Two symmetrical tetradentate Schiff bases derived from 1,7-diaminoheptane", poster presentation at the XVIth Croatian Meeting of Chemists and Chemical Engineers, Split, Croatia (February 1999).

4. T. Friščić, B. Kaitner, "Copper(II) complexes with N,N'-hexylenebissalicylaldimine", poster presentation at the XVIth Croatian Meeting of Chemists and Chemical Engineers, Split, Croatia (February 1999).


2. T. Friščić, E. Meštrović, B. Kaitner, "Gel crystallization and crystallization by temperature-induced convection", poster presentation at the XVth Meeting of Croatian Chemists and Chemical Engineers, Opatija, Croatia (March 1997).