

Curriculum Vitae

Professor Ian Manners

Canada 150 Research Chair, Department of Chemistry

University of Victoria, Canada

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Qualifications and Experience

- 1) Faculty:
1990 - 1994, Assistant Professor (Tenure Track)
Department of Chemistry, University of Toronto, Toronto, Canada.
1994 - 1995, Associate Professor (Tenured)
Department of Chemistry, University of Toronto, Toronto, Canada.
1995 – 2006, Full Professor
Department of Chemistry, University of Toronto, Toronto, Canada.
(Research Group Maintained in Toronto until the Spring of 2008)
2006 – Chaired Full Professor and Marie Curie Chair
School of Chemistry, University of Bristol, Bristol, UK.
2018 – Chaired Full Professor and C150 Research Chair in Materials Science
Department of Chemistry, University of Victoria, Victoria, BC, Canada.
(Research Group Maintained in Bristol until the Fall of 2019)
- 2) Research Associate:
1988-1990, Department of Chemistry, The Pennsylvania State University,
University Park, Pennsylvania, U.S.A. Advisor; Prof. H. R. Allcock.
- 3) Postdoctoral :
1986-87, Department of Inorganic Chemistry, University of Aachen, Aachen, West Germany.
Advisor; Prof. P. Paetzold.
- 4) Predoctoral:
Ph.D. Chemistry, 1982-85, University of Bristol, Bristol, England.
Advisor; Dr. N.G. Connelly.
B.Sc. Chemistry, First Class Honours, 1979-1982, University of
Bristol, England.

Promotions

1. Received early tenure and promotion to Associate Professor at Toronto in 1994 after 4 years as an Assistant Professor.
2. Promoted from Associate Professor to Full Professor after 1 year in 1995 at Toronto (unprecedented accomplishment in Department).

Fellowships, Lectureships, Honours, Research and Teaching Awards

1. Faculty Lecturer: Indian Institute of Technology Kharagpur, India (2020)
2. Neil Bartlett Lectureship at University of California at Berkeley, USA (2020)
3. Inaugural Ray and Dorothy Wilson Lecturer at UCLA, USA (2019)
4. Timms Lecturer, University of Bristol, UK (2020)
5. Murtiashaw Lecturer, University of South Carolina, USA (2019)
6. C150 Research Chair in Materials Science (2018)
7. Distinguished Visiting Professor at Shanghai Jiao Tong University, China (1000 talents programme) (6.2018)
8. RSC de Gennes Prize (for outstanding and exceptional work in the field of materials chemistry) (2017)
9. Distinguished Frankland Lecture, Imperial College (6.2017)
10. Inaugural SCG Chemical Seminar, University of Oxford (2.2017)
11. Eastman Lecture at University of North Carolina (2.2017)

12. List of Most Cited Researchers in Materials Science and Engineering by Elsevier Scopus Data (2016)
13. Honorable Plenary Speaker, International Conference of Polymer Advanced Technology, Hangzhou, China (2015)
14. Honorary Professorship at Jilin University, Changchun, China (2014)
15. Waterloo Institute of Nanotechnology Distinguished Lecturer, University of Waterloo, Ontario, Canada (2014)
16. 3M University Lecturer in Chemistry 2013, Western University, Ontario, Canada.
17. Center for Self-Assembled Chemical Structures (CSACS) Lecturer (Concordia Univ., McGill Univ., and Univ. of Montreal, Quebec, Canada) (2013)
18. Fellow of the Royal Society of Chemistry (FRSC) (2012)
19. RSC Peter Day Award (2012)
20. Elected as a Fellow of the Royal Society (British National Academy of Science) (2011)
21. Alexander von Humboldt Research Award (2011)
22. Macro Group UK Medal (2010)
23. Kilpatrick Lecture Series 2010, Illinois Institute of Technology, Chicago, USA, (2010)
24. Ralph Milkovich Memorial Lecturer, The University of Akron, Ohio, USA (2009)
25. 2009 Distinguished Lecturer, Hong Kong Baptist University (2009)
26. Frontiers in Chemical Research Lecturer (3 lectures), Texas A&M University, USA (2008)
27. 2008 Bayer Distinguished Lecturer, Washington University in St. Louis, USA (2008)
28. Wiberg Lecturer: Ludwig-Maximilians University of Munich, Germany (2008)
29. George W. and Pauline Watt Centennial Lectureship, University of Texas at Austin (2007)
30. Watt Lecturer: University of Texas at Austin, USA (2007)
31. Tilden Lectureship, Royal Society of Chemistry (2007)
32. Royal Society of Chemistry Award in Main Group Chemistry (2005)
33. Royal Society Wolfson Merit Award (2005)
34. European Union Marie Curie Chair (2005)
35. "Reed Lecturer" at Rensselaer Polytechnic Institute Troy, NY, US (2003)
36. 2002 Fall Lecture (2 lectures), Georgia Institute of Technology, US (2002)
37. "Karasek Lectureship", University of Waterloo, Canada (2002)
38. Macromolecular Science and Engineering Award, Canadian Institute of Chemistry (2002)
39. Canadian Institute of Advanced Research Young Investigator Award (Canada's "top 20 under 40" in Science and Engineering) (2002)
40. Steacie Prize (2000) – top award in Canada given to one person under age of 40 in all areas of Science and Engineering
41. Elected as Fellow to the Royal Society of Canada (FRSC) (Canadian National Academy of Science) (2001).
42. Tier I (Senior) Canada Research Chair (2001).
43. Premier's Research Excellence Award (1999).
44. Alcan Lecture Award, Canadian Society of Chemistry (1999)
45. Royal Society Corday-Morgan Medal 1997 (Royal Society, UK).
46. NSERC E. W.R. Steacie Fellow (1997-99).
47. Canadian Society of Chemistry Award in Pure or Applied Inorganic Chemistry (1997).
48. University of Toronto, McLean Award (1997).
49. Fellow of the Chemical Institute of Canada (1997).
50. Rutherford Memorial Medal in Chemistry (1996).
51. Alfred P. Sloan Fellowship (1994-98) (Sloan Foundation, USA)
52. Faculty of Arts & Science Outstanding Teaching Award (1993-94).
53. University of Toronto Senior Alumni Award for Distinctive Contributions to Teaching (1993).
54. Canadian Society of Chemistry IUPAC Travel Award (1993).

Editorship and Membership of Editorial Boards of Journals and Scientific Committees:

1. Dalton Transactions (2007-2011) (Editorial Board)
2. Journal of Inorganic and Organometallic Polymers and Materials (1998-) (Editorial Board)
3. Heteroatom Chemistry (2004-) (Editorial Board)
4. Journal of Organometallic Chemistry (2006-2018) (Associate Editor)
5. UK Representative of European Cooperation in the field of Scientific and Technical Research (COST) program, European Phosphorus Sciences Network
6. Member of Macrogrou UK

Membership of Editorial Advisory Boards of Journals:

1. Angewandte Chemie International Edition (2010-)
2. Chemical Society Reviews (2010-)
3. Macromolecules (1997-2000)
4. New Journal of Chemistry (1998-2001)
5. Macromolecular Chemistry and Physics (1999-2008)
6. Macromolecular Rapid Communications (1999-2008)
7. Organometallics (2001- 2004)
8. Dalton Transactions (2001-2007)
9. Designed Monomers and Polymers (2001-)
10. Advances in Polymer Science (2003-2013)
11. Polymer Chemistry (2010-)
12. Polyhedron (2010-2012)

Scholarly and Professional Work, Mentorship, and Overall Career Metrics

Papers, 785 (Published or Accepted), Books, 4 Book Chapters, 5 Patents, 12
Science and Nature Group papers, 33, *J. Am. Chem. Soc.*, 104
Citations > 52,400 (Google Scholar) h-index = 115 (Google Scholar)
Invited and Plenary Lectures: Career Total = 580

Undergraduates Trained: > 100 PhD Students and Postdoctoral Workers Mentored > 135
Destinations: Industry and Government Labs: 85 Academia: 52*

*13 former group members hold professorial faculty positions at research universities in Canada

Books

1. Inorganic Rings and Polymers of the p-block Elements: From Fundamentals to Applications
Chivers, T.; Manners, I. RSC, 2009 (335 pages).
2. Frontiers in Transition Metal Containing Polymers Abd-El-Aziz, A.S.; Manners, I. (eds.) John
Wiley & Sons, Inc. Hoboken, New Jersey, 2007 (534 pages).
3. Metal-Containing and Metallosupramolecular Polymers and Materials
Schubert, U.S.; Newkome, G.R.; Manners, I. (eds.)
Book: *ACS Symp. Ser. Vol 928, Washington, DC 2006* (575 pages).
4. Synthetic Metal-Containing Polymers. Manners, I. *Wiley-VCH*, 2004 (280 pages).

Selected Publications from Manners Research Groups Based in Canada

(A) Selected Publications from Research Group Based in Victoria (2018 -)

1. Functional Nanoparticles through π -Conjugated Polymer Self-Assembly.
MacFarlane, L.R.; Shaikh, H.; Garcia-Hernandez, J.D.; Vespa, M.; Fukui T.; Manners, I.
Nature Reviews Materials, **2021**, 6, 7.
2. Efficient Energy Transport in an Organic Semiconductor Mediated by Transient Exciton
Delocalization.
Sneyd, A.J.; Fukui, T.; Paleček, D.; Prodhon, S.; Wagner, I.; Zhang, Y.; Sung, J.; Collins, S.M.;
Slater, T.J.A.; Andaji-Garmaroudi, Z.; MacFarlane, L.R.; Garcia-Hernandez, J.D.; Wang, L.;
Whittell, G.R.; Hodgkiss, J.M.; Chen, K.; Beljonne, D.; Manners, I.; Friend, R.H.; Rao, A.
Science Adv. **2021**, (in press).

3. Dendritic Micelles with Controlled Branching and Sensor Applications.
Zhang, Y.; Pearce, S.; Eloi, J-C.; Harniman, R.L.; Tian, J.; Cordoba, C.; Kang, Y.; Fukui, T.; Qiu, H.; Blackburn, A.; Richardson, R.M.; Manners, I. *J. Am. Chem. Soc.* **2021**, *143*, 5805
4. Uniform 1D Micelles and Patchy Block Comicelles via Scalable, One-Step Crystallization-Driven Block Copolymer Self-Assembly.
Song, S.; Liu, X.; Nikbin, E.; Howe, J.Y.; Yu, Q.; Manners, I.; Winnik, M.A. *J. Am. Chem. Soc.* **2021**, *143*, 6266.
5. Efficient Energy Funneling in Spatially Tailored Segmented Conjugated Block Copolymer Nanofiber-Quantum Dot or Rod Conjugates.
Zhang, Y.; Shaikh, H.; Sneyd, A.; Tian, J.; Xiao, J.; Blackburn, A.; Rao, A.; Friend, R.H.; Manners, I. *J. Am. Chem. Soc.* **2021**, *143*, 7032.
6. Emerging Applications for Living Crystallization-Driven Self-Assembly.
MacFarlane, L.R.; Zhao, C; Cai, J.; Qui, H.; Manners, I. *Chem. Sci.*, **2021**, *12*, 4661.
7. Spherulite-Like Micelles.
Song, S.; Zhou, H.; Ye, S.; Tam, J.; Howe, J.Y.; Manners, I.; Winnik, M.A. *Angew. Chem. Int. Ed.*, **2021**, *60*, 10950.
8. Tailored Self-Assembled Photocatalytic Nanofibers for Visible-light Driven Hydrogen Production.
Tian, J.; Zhang, Y.; He, Y.; Jin, X-H.; Pearce, S. Eloi, J-C.; Harniman, R.L.; Alibhai, D.; Ye, R.; Phillips, D.L.; Manners, I. *Nature Chem.* **2020**, *12*, 1150.
9. Seeded Self-Assembly of Charge-Terminated Poly(3-hexylthiophene) Amphiphiles based on the Energy Landscape.
Fukui, T.; Garcia-Hernandez, J.D.; MacFarlane, L.R.; Shixing, L.; Whittell, G.R.; Manners, I. *J. Am. Chem. Soc.* **2020**, *142*, 15038.
10. Solid-State Donor–Acceptor Coaxial Heterojunction Nanowires via Living Crystallization-Driven Self-Assembly.
Shaikh, H.; Jin, X-H.; Harniman, R.L.; Richardson, R.M.; Whittell, G.R.; Manners, I. *J. Am. Chem. Soc.* **2020**, *142*, 13469.
11. Cellular Uptake and Targeting of Low Dispersity, Dual Emissive, Segmented Block Copolymer Nanofibers.
Street, S.; He, Y.; Jin, X-H.; Hodgson, L.; Verkade, P.; Manners, I. *Chem. Sci.* **2020**, *11*, 8394.
12. Bottom-up Device Fabrication via the Seeded Growth of Polymer-based Nanowires.
El-Zubir, O.; Kynaston, E.L.; Gwyther, J.; Nazemi, A.; Gould, O.E.C.; Whittell, G.R; Horrocks, B.R.; Manners, I.; Houlton, A. *Chem. Sci.* **2020**, *11*, 6222.
13. Solvent Effects Leading to a Variety of Different 2D Structures in the Self-Assembly of a Crystalline-Coil Block Copolymer with an Amphiphilic Corona-Forming Block.
Song, S.F.; Yu, Q.; Zhou, H.; Hicks, G. Zhu, H.; Rastogi, C.K.; Manners, I.; Winnik, M.A. *Chem. Sci.* **2020**, *11*, 4631.
14. Tailored Multifunctional Micellar Brushes via Crystallization-Driven Growth from a Surface.
Cai, J.; Li, C.; Kong, N.; Lu, Y.; Lin, G.; Wang, X.; Yao, Y.; Manners, I.; Qiu, H. *Science*, **2019**, *366*, 1095. For highlight on this work see: *Science*, **2019**, *366*, 1078.
15. Homo- and Heterodehydrocoupling of Phosphines Mediated by Alkali Metal Catalysts.
Wu, L.; Annibale, V.; Jiao, H.; Brookfield, A.; Collison, D.; Manners, I. *Nature Comm.*, **2019**, *10*, 2786.
16. Metal-Free Dehydropolymerisation of Phosphine-Boranes using Cyclic (Alkyl)(Amino)Carbenes as Hydrogen Acceptors.
Oldroyd, N.L.; Chitnis, S.S.; Annibale, V.T.; Arz, M.A.; Sparkes, H.A.; Manners, I.

Nature Comm., **2019**, *10*, 1370.

17. Uniform Biodegradable Fiber-Like Micelles and Block Comicelles via “Living” Crystallization-Driven Self-Assembly of Poly(-lactide) Block Copolymers: The Importance of Reducing Unimer Self-Nucleation via Hydrogen Bond Disruption. He, Y.; Eloi, J.-C.; Harniman, R.L.; Richardson, R.M.; Whittell, G.R.; Mathers, R.T.; Dove, A.P.; O’Reilly, R.K.; Manners, I. *J. Am. Chem. Soc.*, **2019**, *141*, 19088.
18. Trivalent Titanocene Alkyls and Hydrides as Well-Defined, Highly Active, and Broad Scope Precatalysts for Dehydropolymerization of Amine-Boranes. LaPierre, E.A.; Patrick, B.O.; Manners, I. *J. Am. Chem. Soc.*, **2019**, *141*, 20009.
19. Ring-Opening Polymerization of Cyclic Phosphonates: Access to Inorganic Polymers with a P-O Main Chain. Arz, M.A.; Annibale, V.T.; Kelly, N.L.; Hanna, J.V.; Manners, I. *J. Am. Chem. Soc.*, **2019**, *141*, 2894.
20. Extending the Scope of “Living” Crystallization-Driven Self-Assembly: Well-Defined 1D Micelles and Block Comicelles from Crystallizable Polycarbonated Block Copolymers. Finnegan, J.R.; He, X.; Street, S.T.G.; Garcia-Hernandez, J.D.; Hayward, D.W.; Harniman, R.L.; Richardson, R.M. Whittell, G.R.; Manners, I. *J. Am. Chem. Soc.*, **2018**, *140*, 17127.
21. Scalable Fiber-Like Micelles and Block Co-Micelles by Polymerization-Induced Crystallization-Driven Self-Assembly. Oliver, A.E; Boott, C.E.; Davis, S.; Pearce, S.; Manners, I. *J. Am. Chem. Soc.*, **2018**, *140*, 18104.

(B) Selected Publications from Research Group Based in Toronto (1990 – 2008)

1. Redox-Mediated Synthesis and Encapsulation of Inorganic Nanoparticles in Shell-Cross-Linked Cylindrical Polyferrocenylsilane Block Copolymer Micelles. Wang, H.; Wang, X.; Winnik, M.A.; Manners, I. *J. Am. Chem. Soc.* **2008**, *130*, 12921.
1. Cylindrical Block Copolymer Micelles and Co-Micelles of Controlled Length and Architecture. Wang, X.; Guerin, G.; Wang, H.; Wang, Y.; Manners, I.; Winnik, M.A. *Science*, **2007**, *317*, 644. For a highlight on this work see, “Materials Science: Micelles Made to Order”, *Science*, **2007**, *317*, 604 and, “Tailored-Made Nanostructures”, *Chem. Eng. News* **2007**, August 6, 9.
3. Cylindrical Block Co-Micelles with Spatially Selective Functionalization by Nanoparticles. Wang, H.; Lin, W.; Fritz, K. P.; Scholes, G. D.; Winnik, M. A.; Manners, I. *J. Am. Chem. Soc.* **2007**, *129*, 12924.
4. Shell-Cross-Linked Cylindrical Polyisoprene-*b*-Polyferrocenylsilane (PI-*b*-PFS) Block Copolymer Micelles: One-Dimensional (1D) Organometallic Nanocylinders. Wang, X.; Liu, K.; Arsenault, A. C.; Rider, D. A.; Ozin, G. A.; Winnik, M. A.; Manners, I. *J. Am. Chem. Soc.* **2007**, *129*, 5630.
5. From colour fingerprinting to the control of photoluminescence in elastic photonic crystals. Arsenault, A.C.; Clark, T.J.; von Freymann, G.; Cademartiri, L.; Sapienza, R.; Bertolotti, J.; Vekris, E.; Wong, S.; Kitaev, V.; Manners, I.; Wang, R.Z.; John, S.; Wiersma, D.; Ozin, G.A. *Nature Materials* **2006**, *5*, 179.
6. Photocontrolled Living Polymerizations. Tanabe, M.; Vandermeulen, G.W.M.; Chan, W.Y.; Cyr, P.W.; Vanderark, L.; Rider, D.A.; Manners, I. *Nature Materials* **2006**, *5*, 467. For a highlight on this work see, *Switching off Polymerisation in the Dark*, *Chemistry World*,

- 'News'*, May 16, **2006** and *Sunlight Controls Polymer Growth Chem. Eng. News.* **2006**, May 29, p 9.
7. Reactions of P-Donor Ligands with N-Silyl(halogeno)organophosphoranimines: Formation of Cations with P-P Coordination Bonds and Poly(alkyl/aryl)phosphazenes at Ambient Temperature.
Huynh, K.; Lough, A. J.; Manners, I. *J. Am. Chem. Soc.* **2006**, *128*, 14002.
 8. Homogeneous, Titanocene-Catalyzed Dehydrocoupling of Amine-Borane Adducts Clark, T.J.; Russell, C.A.; Manners, I. *J. Am. Chem. Soc.* **2006**, *128*, 9582.
 9. Poisoning of Heterogeneous, Late Transition Metal Dehydrocoupling Catalysts by Boranes and Other Group 13 Hydrides Jaska, C. A.; Clark, T. J.; Clendenning, S. B.; Grozea, D.; Turak, A.; Lu, Z.-H.; Manners, I. *J. Am. Chem. Soc.* **2005**, *127*, 5116.
 10. Highly Metallized Polymers: Synthesis, Characterization, and Lithographic Patterning of Polyferrocenylsilanes with Pendant Cobalt, Molybdenum, and Nickel Cluster Substituents. Chan, W. Y.; Clendenning, S. B.; Berenbaum, A.; Lough, A. J.; Aouba, S.; Ruda, H. E.; Manners, I. *J. Am. Chem. Soc.* **2005**, *127*, 1765.
 11. Block Copolymers under Periodic, Strong Three-Dimensional Confinement. Arsenault, A.C.; Rider, D.A.; Tétreault, Chen, J.I-L.; Coombs, N.; Ozin, G.A.; Manners, I. *J. Am. Chem. Soc.* **2005**, *127*, 9954.
 12. Photochemically and Thermally Tunable Planar Defects in Colloidal Photonic Crystals. Fleischhaker, F.; Arsenault, A.C.; Kitaev, A.; Peiris, F.C.; von Freymann, G.; Manners, I.; Zentel, R.; Ozin, G.A. *J. Am. Chem. Soc.* **2005**, *127*, 9318.
 13. Redox-Induced Synthesis and Encapsulation of Metal Nanoparticles in Shell-Cross-Linked Organometallic Nanotubes. Wang, X-S.; Wang, H.; Coombs, N.; Winnik, M.A.; Manners, I. *J. Am. Chem. Soc.* **2005**, *127*, 8924.
 14. Reversible, Strain-Controlled Haptotropic Shifts of Cyclopentadienyl Ligands in [1]- and [2]Metallocenophanes. Tanabe, M.; Bourke, S.C.; Herbert, D.E.; Lough, A.J.; Manners, I. *Angew Chem. Int. Ed. Engl.* **2005**, *44*, 5886.
 15. Gelation of Helical Polypeptide-Random Coil Diblock Copolymers by a Nanoribbon Mechanism. Kim, K.T.; Park, C.; Vandermeulen, G.W.M.; Rider, D.A.; Kim, C.; Winnik, M.A.; Manners, I. *Angew Chem. Int. Ed. Engl.* **2005**, *44*, 7964.
 16. Donor-Stabilized Cations and Imine Transfer from N-Silylphosphoranimines. Rivard, E.; Huynh, K.; Lough, A. J.; Manners, I. *J. Am. Chem. Soc.* **2004**, *126*, 2286.
 17. Catalytic Dehydrocoupling of Amine-Borane and Phosphine-Borane Adducts: The Mechanism is Heterogeneous in One Case and Homogeneous in the Other. Jaska, C.A.; Manners, I. *J. Am. Chem. Soc.* **2004**, *126*, 1334.
 18. Ambient Temperature, Tandem Catalytic Dehydrocoupling / Hydrogenation Reactions using Rh Colloids and Me₂NH•BH₃ as a Stoichiometric H₂ Source. Jaska, C.A.; Manners, I. *J. Am. Chem. Soc.* **2004**, *126*, 2698.
 19. Heterogeneous or Homogeneous Catalysis? Mechanistic Studies of the Rhodium-Catalyzed Dehydrocoupling of Amine-Borane and Phosphine-Borane Adducts. Jaska, C.A.; Manners, I. *J. Am. Chem. Soc.* **2004**, *126*, 9776.
 20. Surface Passivation of Luminescent Colloidal Quantum Dots with Poly(Dimethylaminoethyl methacrylate) through a Ligand Exchange Process. Wang, X.-S.; Dykstra, T. E.; Salvador, M. R.; Manners, I.; Scholes, G. D.; Winnik, M. A. *J. Am. Chem. Soc.* **2004**, *126*, 7784.
 21. Photolytic Living Anionic Ring-Opening Polymerization (ROP) of Silicon-Bridged [1]Ferrocenophanes via an Iron-Cyclopentadienyl Bond Cleavage Mechanism. Tanabe, M.; Manners, I.; *J. Am. Chem. Soc.* **2004**, *126*, 11434.

22. Redox-Active Organometallic Vesicles: Aqueous Self-Assembly of a Diblock Copolymer with a Hydrophilic Polyferrocenylsilane Polyelectrolyte Block.
Power-Billard, K. N.; Spontak, R. J.; Manners, I. *Angew. Chem Int. Ed. Engl.* **2004**, *43*, 1260.
23. Isolation of the First [1]Ruthenocenophanes : Synthesis of Poly ruthenocenylstannanes by Ring-Opening Polymerization.
Vogel, U.; Lough, A. J.; Manners, I. *Angew Chem. Int. Ed. Engl.* **2004**, *43*, 3321.
24. Swellable, Redox-Active Shell-Crosslinked Organometallic Nanotubes.
Wang, X. S.; Winnik, M. A.; Manners, I. *Angew Chem. Int. Ed. Engl.* **2004**, *43*, 3703.
25. Transition Metal-Catalyzed Formation of Boron-Nitrogen Bonds: Catalytic Dehydrocoupling of Amine-Borane Adducts to Form Aminoboranes and Borazines.
Jaska, C.A.; Temple, K.; Lough, A.J.; Manners, I. *J. Am. Chem. Soc.* **2003**, *125*, 9424.
26. A Reversible Tube-to Rod Transition in a Block Copolymer Micelle.
Raez, J.; Tomba, J.P.; Manners, I.; Winnik, M.A. *J. Am. Chem. Soc.* **2003**, *32*, 9546.
27. Shell Cross-linked Cylinders of Polyisoprene-*b*-Ferrocenyldimethylsilane: Formation of Magnetic Ceramic Replicas and Microfluidic Channel Alignment and Patterning.
Wang X.S.; Arsenaault, A.; Ozin, G.A.; Winnik, M.A. *J. Am. Chem. Soc.* **2003**, *125*, 12686.
28. Bulk microphase segregation of an asymmetric organometallic-inorganic-diblock copolymer. A remarkable example of concentric cylinders. Raez, J.; Zhang, Y. M.; Cao, L.; Petrov S.; Erlacher K.; Wiesner U.; Manners I.; Winnik M.A. *J. Am. Chem. Soc.* **2003**, *125*, 6010.
29. Nucleophilically Assisted and Cationic Ring-Opening Polymerization of Tin-Bridged [1]Ferrocenophanes. Baumgartner, T.; Jakle, F.; Rulkens, R.; Zech, G.; Lough, A. Manners, I.; *J. Am. Chem. Soc.* **2002**, *124*, 10062.
30. Nanotubes from the Self-assembly of Asymmetric Crystalline-Coil Polyferrocenylsilane-Polysiloxane Block Copolymers.
Raez, J.; Manners, I.; Winnik, M.A. *J. Am. Chem. Soc.* **2002**, *124*, 10381.
31. Genesis of Nanostructured, Magnetically Tunable Ceramics from the Pyrolysis of Cross-Linked Polyferrocenylsilane Networks and Formation of Shaped Macroscopic Objects and Micron Scale Patterns by Micromolding Inside Silicon Wafers.
Ginzburg, M.; MacLachlan, M.J.; Yang, S.-M.; Coombs, N.; Coyle, T.W.; Raju, N.P.; Greedan, J.E.; Herber, R.H.; Ozin, G.A.; Manners, I. *J. Am. Chem. Soc.* **2002**, *124*, 2625.
32. Polyferrocenylsilane Microspheres: Synthesis, Mechanism of Formation, Size and Charge Tunability, Electrostatic Self-Assembly and Pyrolysis to Spherical Magnetic Ceramic Particles.
Kulbaba, K.; Cheng, A.; Bartole, A.; Greenberg, S.; Resendes, R.; Coombs, N.; Safa-Sefat, A.; Greedan, J.E.; Stöver, H.D.H.; Ozin, G.A.; Manners, I. *J. Am. Chem. Soc.* **2002**, *124*, 12522.
33. Putting Metals into Polymers. Manners, I. Invited Article *Science* **2001**, *294*, 1664.
34. Tuning the Strain and Polymerizability of Organometallic Rings: The Synthesis, Structure, and Ring-Opening Polymerization Behavior of [2]Ferrocenophanes with C-Si, C-P and C-S Bridges. Resendes, R.; Nelson, J.M.; Fischer, A.; Jäkle, F.; Lough, A.J.; Manners, I. *J. Am. Chem. Soc.* **2001**, *123*, 2116.
35. The Nature of the Active Catalyst in Late Transition Metal-Mediated Ring-Opening Polymerization (ROP) Reactions: Mechanistic Studies of the Platinum-Catalyzed ROP of Silicon-Bridged [1]Ferrocenophanes.
Temple, K.; Jakle, F.; Sheridan, J.B.; Manners, I. *J. Am. Chem. Soc.* **2001**, *123*, 1355.
36. Fabrication of Oriented Nanoscopic Ceramic Lines from Cylindrical Micelles of an Organometallic Poly(ferrocene) Block Copolymer.
Massey, J.; Winnik, M.A.; Manners, I.; Chan, V.C.H.; Spatz, J.P.; Ostermann, J.M.; Enchelmaier, R.; Möller, M. *J. Am. Chem. Soc.* **2001**, *123*, 3147. The work was highlighted in *Chem. and Eng. News* News of the Week (2001, April 2, p 13) and was chosen as one of the chemistry highlights of the year 2001 by *Chem. and Eng. News* (**2001**, Dec. 10 p 45).

37. Shaped Ceramics with Tunable Magnetic Properties from Metal-Containing Polymers. MacLachlan, M.J.; Ginzburg, M.; Coombs, N.; Coyle, T.W.; Raju, N.P.; Greedan, J.E.; Ozin, G.A.; Manners, I. *Science* **2000**, *287*, 1460.
38. Ring-Opening Protonolysis of Strained Silicon-containing rings: A new Approach to Ions with Silylium Character. MacLachlan, M.J.; Bourke, S.C.; Lough, A.J.; Manners, I. *J. Am. Chem. Soc.*, **2000**, *122*, 2126.
39. Superparamagnetic Ceramic Nanocomposites: Synthesis And Pyrolysis Of Ring-Opened Poly(ferrocenes) Inside Mesoporous Silica. MacLachlan, M.J.; Ginzburg, M.; Coombs, H.; Ozin, G.A.; Manners, I. *J. Am. Chem. Soc.* **2000**, *122*, 3878.
40. Nucleophilically-Assisted Ring-Opening Polymerization of Group 14 Element-Bridged [1]Ferrocenophanes. Jäkle, F.; Rulkens, R.; Zech, G.; Massey, J.A.; Manners, I. *J. Am. Chem. Soc.* **2000**, *122*, 4231.
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