

CURRICULUM VITAE

PERSONAL DETAILS

Full name and Title: Professor Andrew Peter Dove

Department: Chemistry

Title of current appointment: Professor of Chemistry

Education/Qualifications:

Oct 1995 – June 1999

University of York, Heslington, York, N. Yorks, UK, YO1 5DD.

M.Chem. – Chemistry (2:1 Hons) including 1 year Industrial Placement - *bp* Chemicals Ltd., Hull.

Oct 1999 – May 2003

Imperial College, Exhibition Road, South Kensington, London, UK, SW7 2AY.

Ph.D. and Diploma of Imperial College under the supervision of Prof. Vernon C. Gibson.

Title: *Novel β -diketiminato complexes of tin(II), magnesium and zinc as catalysts/initiators for polymerisation of methyl methacrylate, lactide and other cyclic ester monomers.*

Appointments held:

June 2003 – August 2004: Postdoctoral Research Fellow

Stanford University, Stanford, California, USA, 94305.

September 2004 – July 2005: CIPMA Postdoctoral Research Fellow

IBM Almaden Research Center, Harry Road, San Jose, California, USA, 95120.

September 2005 – August 2010: RCUK Fellow in Nanotechnology

September 2006 – August 2009: Assistant Professor

September 2009 – May 2014: Associate Professor

June 2014 – Present: Professor of Chemistry

Department of Chemistry, University of Warwick, Coventry, West Midlands, UK, CV4 7AL

October 2012 – Present: Royal Society Industry Fellow

Department of Chemistry, University of Warwick/Critical Pharmaceuticals Nottingham

February 2013 – Present: Adjunct Associate Professor

Materials Engineering, Monash University, Melbourne, Australia

Membership of learned or professional societies:

- Member of the Royal Society of Chemistry
- Member of the American Chemical Society
- Member of POLY division of the American Chemical Society
- Member of Polymeric Materials in Science and Engineering (PMSE) division of the American Chemical Society

- Member of the Pure and Applied Macromolecular Science Group (Macro Group UK), previously committee member (2007 – 2013)
- Previously (2005 – 2009) committee member of the Recent Appointees in Polymer Science Network (RAPS)

TEACHING

Lecture Courses:

CH160 – Introduction to Inorganic Chemistry (Year 1; 10 Lectures) – 2008 to present

CH403 – Metalloorganic Chemistry (Year 4; 5 Lectures) – 2006 to 2011

CH404 – Macromolecular Chemistry (Year 4; 5 Lectures) – 2012 to present

CH967 – Fundamentals of Polymerisation (MSc, 5 Lectures) – 2012 to present

CH969 – Physical Properties of Polymers (MSc, 5 Lectures) – 2012 to present

Tutorials and Workshops:

CH160 – 1st Year Inorganic Tutorials (ca. 28 contact hours) – 2006 to present

CH161 – 1st Year Organic Workshops (ca. 2 contact hours) – 2006 to present

CH242 – 2nd Year Polymer Tutorials (ca. 8 contact hours) – 2006 to present

CH970 – Polymers in the Real World (ca. 5 contact hours) – 2012 to present

CH972 – Group Research Project (ca. 12 contact hours) – 2012 to present

Laboratory Courses:

CH222 – Spectroscopy Laboratory (2nd Year; 6 days) – 2007 to 2011

CH3C6 – Extended Laboratory (3rd Year; 5 days) – 2012 to present

CH971 – Polymer Laboratories (MSc; 3 days) – 2012 to present

MChem and MSc Research Project Supervision:

16 MChem and 2 MSc research projects successfully supervised

RESEARCH

Publications (‡ = sole corresponding author; # = joint corresponding author):

Peer-reviewed papers in primary journals (Title, Authors, Journal Name, Year, Issue, Pages)

75) *Osmium Atoms and Os₂ Molecules Move Faster on Selenium-Doped Compared to Sulfur-Doped Boronic Graphenic Surfaces.* Barry, N. P. E.; Pitto-Barry, A.; Tran, J.; Spencer, S. E. F.; Johansen, A. M.; Sanchez, A. M. Dove, A. P.; O'Reilly, R. K.; Deeth, R. J.; Beanland, R.; Sadler, P. J. *Chem. Mater.* (2015) 27, 5100 - 5105.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 8.535);

#74) *N-Heterocyclic Olefins as Organocatalysts for Polymerization: Preparation of Well-Defined Poly(propylene oxide).* Naumann, S.; Thomas, A. W.; Dove, A. P.; *Angew Chem. Int. Ed.* (2015), 54, 9550 - 9554.

Publisher: Wiley GMBH (ISI 2012 Impact Factor = 13.734);

#73) *Functional Degradable Polymers by Radical Ring-Opening Copolymerization of MDO and Vinyl Bromobutanoate: Synthesis, Degradability and Post-Polymerization Modification.* Hedir, G. G.; Bell, C. A.; O'Reilly, R. K.; Dove, A. P. *Biomacromolecules* (2015), 16, 2049 - 2058.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.371);

‡72) *N-Heterocyclic Carbenes as Organocatalysts for Polymerizations: Trends and Frontiers.* Naumann, S.; Dove, A. P. *Polym. Chem.* (2015), 6, 3185 - 3200.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

#71) *Self-assembly of cyclic polymers.* Williams, R. J.; Dove, A. P.; O'Reilly, R. K.; *Polym. Chem.* (2015), 6, 2998 - 3008.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

‡70) *Synthesis of Pentadecalactone Copolymers with Independently Tunable Thermal and Degradation Behavior.* Wilson, J. A.; Hopkins, S. A.; Wright, P. W.; Dove, A. P.; *Macromolecules* (2015), 48, 950–958.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

‡69) *Simultaneous orthogonal dual-click approach to tough, in situ-forming hydrogels for cell encapsulation.* Truong, V. X.; Ablett, M. P.; Richardson, S. M.; Hoyland, J. A.; Dove, A. P. *J. Am. Chem. Soc.* (2015) 137, 1618 - 1622.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 11.444);

68) *Structural reorganization of cylindrical nanoparticles triggered by polylactide stereocomplexation.* Sun, L.; Pitto-Barry, A.; Kirby, N.; Schiller, T. L.; Sanchez, A. M.; Dyson, M. A.; Sloan, J.; Wilson, N. R.; O'Reilly R. K.; Dove A. P. *Nature Commun.* (2014) 5:5746 DOI:10.1038/ncomms6746.

Publisher: Nature Publishing Group (ISI 2012 Impact Factor = 10.015);

67) *Step-Growth Polymerization in the 21st Century.* Dove, A. P.; Meier, M. A. R. *Macromol. Chem. Phys.* (2014), 215, 2135 - 2137.

Publisher: Wiley (ISI 2012 Impact Factor = 2.451);

66) *Precious metal carborane polymer nanoparticles: characterisation of micellar formulations and anticancer activity.* Barry, N. P. E.; Pitto-Barry, A.; Romero-Canelón, I.; Tran, J.; Soldevila-Barreda, J. J.; Hands-Portman, I.; Smith, C. J.; Kirby, N.; Dove, A. P.; O'Reilly, R. K.; Beanland, R.; Sadler, P. J. *Faraday Discuss.* (2014), 175, 229 - 240.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 4.606);

#65) *Block copolymer materials from the organocatalytic ring-opening polymerization of a pentaerythritol-derived cyclic carbonate.* Brannigan, R. P.; Walder, A.; **Dove, A. P.**; *J. Polym. Sci. Part A: Polym. Chem.*, **2014**, 52, 2279 – 2286.

Publisher: Wiley (ISI 2012 Impact Factor = 3.543);

64) *Fabrication of crystals from single metal atoms.* Barry, N. P. E.; Pitto-Barry, A.; Sanchez, A. M.; **Dove, A. P.**; Procter, R. J.; Soldevila-Barreda, J. J.; Kirby, N.; Hands-Portman, I.; Smith, C. J.; O'Reilly, R. K.; Beanland, R.; Sadler, P. J. *Nature Commun.*, **2014**, 5, 3851.

Publisher: Nature Publishing Group (ISI 2012 Impact Factor = 10.015);

#63) *Synthetic strategies, sustainability and biological applications of malic acid-based polymers.* King, S. L.; Truong, V. X.; Kirchhoefer, C.; Pitto-Barry, A.; **Dove, A. P.** *Green Mater.*, **2014**, 2, 107 – 122.

Publisher: Institute of Civil Engineers (ISI 2012 Impact Factor = N/A);

#62) *Functional Degradable Polymers by Xanthate-Mediated Polymerization.* Hedir, G. G.; Bell, C. A.; Jeong, N. S.; Chapman, E.; Collins, I. R.; O'Reilly, R. K.; **Dove, A. P.** *Macromolecules*, **2014**, 47, 2847 - 2852.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

61) *Implementation of metal-free ring-opening polymerization in the preparation of aliphatic polycarbonate materials.* Mespouille, L.; Coulembier, O.; Kawalec, M.; **Dove, A. P.**; Dubois, Ph. *Prog. Polym. Sci.*, **2014**, 39, 1144 - 1164.

Publisher: Elsevier (ISI 2012 Impact Factor = 26.838);

#60) *Chaining up carbon dioxide.* **Dove, A. P.** *Nature Chem.*, **2014**, 6, 276 - 277.

Publisher: Nature Publishing Group (ISI 2012 Impact Factor = 21.757);

#59) *'Immortal' ring-opening polymerisation of ω -pentadecalactone by $Mg(BHT)_2(THF)_2$.* Wilson, J. A.; Hopkins, S. A.; Wright, P. W.; **Dove, A. P.** *Polym. Chem.*, **2014**, 5, 2691 - 2694.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

#58) *Surface grafted poly(ϵ -caprolactone) prepared using organocatalysed ring-opening polymerisation followed by SI-ATRP.* Ercole, F.; Rodda, A. E.; Meager, L.; Forsythe J. S.; **Dove, A. P.** *Polym. Chem.*, **2014**, 5, 2809 - 2815.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

#57) *A Microstereolithography Resin Based on Thiol-Ene Chemistry: Towards Biodegradable Extracellular Constructs for Tissue Engineering.* Barker, I. A.; Ablett, M.

P.; Gilbert, H. T.; Leigh, S. J.; Covington, J. A.; Hoyland, J. A.; Richardson, S. M.; **Dove, A. P.** *Biomater. Sci.*, **2014**, 2, 472 - 475.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = n/a);

#56) *Expanding the scope of the crystallization-driven self-assembly of polylactide-containing polymers.* Pitto-Barry, A.; **Dove, A. P.**; O'Reilly, R. K. *Polym. Chem.* **2014**, 5, 1427 - 1436.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

55) *Control Over Molar mass, Dispersity, End-groups and Kinetics in Cyclopolymerization of ortho-Phthalaldehyde: Adapted Choice of Phosphazene Organocatalyst.* De Winter, J.; **Dove, A. P.**; Knoll, A.; Gerbaux, P.; Dubois, Ph.; Coulembier, O. *Polym. Chem.* **2014**, 5, 706 - 711.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

#54) *In Situ-Forming Robust Chitosan Hydrogels Prepared by Copper-Free Azide-Alkyne Click Reaction for Tissue Engineering.* Truong, V. X.; Ablett, M. P.; Gilbert, H. T. G.; Bowen, J.; Richardson, S. M.; Hoyland, J. A.; **Dove, A. P.** *Biomaterials Sci.* **2014**, 2, 167 – 175.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = n/a);

#53) *Tuning the Size of Cylindrical Micelles from Poly(L-Lactide)-b-Poly(Acrylic Acid) Diblock Copolymers based on Crystallization-Driven Self-Assembly.* Sun, L.; Petzetakis, N.; Pitto-Barry, A.; Schiller, T. L.; Kirby, N.; Keddie, D. J.; Boyd, B. J.; O'Reilly, R. K.; **Dove, A. P.** *Macromolecules* **2013**, 46, 9074 - 9082.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

#52) *Directed Differentiation and Neurite Extension of mouse Embryonic Stem Cell on Aligned Poly(lactide) Nanofibers Functionalized with YIGSR Peptide.* Smith Callahan, L.; Xie, S.; Barker, I. A.; Zheng, J.; Reneker, D. H.; **Dove, A. P.**; Becker, M. L. *Biomaterials*, **2013**, 34, 9089 – 9095.

Publisher: Elsevier (ISI 2012 Impact Factor = 7.604);

51) *Poly(D-glucose carbonate) Block Copolymers: A platform for natural product-based nanomaterials with solvothermotic characteristics.* Gustafson, T.; Lonneck, A.; Heo, G.-S.; Zhang, S.; **Dove, A. P.**; Wooley, K. L. *Biomacromolecules*, **2013**, 14, 3346 – 3353.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.371);

50) *A Simple and Efficient Synthesis of an Acid-Labile Polyphosphoramidate by Organobase-Catalyzed Ring-Opening Polymerization and Transformation to Polyphosphoester Ionomers by Acid Treatment.* Zhang, S.; Wang, H.; Shen, Y.; Zhang, F.; Seetho, K.; Zou, J.; Taylor, J.-S. A.; **Dove, A. P.**; Wooley, K. L. *Macromolecules* **2013**, 46, 5141 – 5149.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

#49) *Organocatalytic, Stereoselective Nucleophilic Addition “Click” Reaction of Thiols to Propionic Acid Esters for Polymer-Polymer Coupling.* Truong, V. X. and **Dove, A. P.** *Angew. Chem. Int. Ed. Engl.* **2013**, 52, 4132 - 4136.

Publisher: Wiley GMBH (ISI 2012 Impact Factor = 13.734);

48) *Hollow Block Copolymer Nanoparticles 2 through a Spontaneous One-step 3 Structural Reorganization.* Petzetakis, N.; Robin, M. P.; Patterson, J. P.; Kelley, E. G.; Cotanda, P.; Bomans, P. H. H.; Sommerdijk, N. A. J. M.; **Dove, A. P.**; Epps III, T. H.; O'Reilly, R. K. *ACS Nano* **2013**, 7, 1120 -1128.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 12.062);

***47)** *Triarylsulfonium Hexafluorophosphate Salts as Photoactivated Acidic Catalysts for Ring-Opening Polymerisation.* Barker, I. A.; **Dove, A. P.** *Chem. Commun.* **2013**, 49, 1205 - 1207.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 6.378);

***46)** *Benzyl Bispidine as an Efficient Replacement for (-)-Sparteine in Ring Opening Polymerisation.* Todd, R.; Rubio, G.; Hall, D. J.; Tempelaar, S.; **Dove, A. P.**; *Chem. Sci.* **2013**, 4, 1092 - 1097.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 8.314);

***45)** *Fabrication of 3-Dimensional Cellular Constructs via Microstereolithography Using a Simple, Three-Component, Poly(Ethylene Glycol) Acrylate-Based System.* Leigh, S. J.; Gilbert, H. T.; Barker, I. A.; Richardson, S. M.; Hoyland, J. A.; Covington, J. A.; **Dove, A. P.** *Biomacromolecules* **2013**, 14, 186 – 192.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.371);

44) *Morpholine-Functionalized Polycarbonate Hydrogel for Heavy Metal Ion Sequestration.* Kawalec M.; **Dove, A. P.**; Mespouille, L.; Dubois, P. *Polym. Chem.* **2013**, 4, 1260 - 1270.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

***43)** *Synthesis and Post-Polymerisation Modification of Aliphatic Poly(carbonate)s prepared by Ring-Opening Polymerisation.* Tempelaar, S.; Mespouille, L.; Coulembier, O.; Dubois, Ph.; **Dove, A. P.** *Chem. Soc. Rev.* **2013**, 42, 1312 - 1336.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 24.892);

***42)** *Preparation of in situ-Forming Poly(5-methyl-5-allyloxycarbonyl-1,3-dioxan-2-one)-Poly(ethylene glycol) Hydrogels with Tuneable Swelling, Mechanical Strength and Degradability* Truong, V. X.; Barker, I. A.; Tan, M.; Mespouille, L.; Dubois, Ph.; **Dove A. P.** *J. Mater. Chem. B.* **2013**, 1, 221 - 229.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = n/a);

***41)** *Organocatalytic Synthesis and Post-Polymerization Functionalization of Propargyl-Functional Poly(Carbonate)s.* Tempelaar, S.; Barker, I. A.; Truong, V. X.; Hall, D. J.; Mespouille, L.; Dubois, Ph.; **Dove A. P.** *Polym. Chem.* **2013**, 4, 174 - 183.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

***40)** *Organic Catalysis for Ring-Opening Polymerization.* Dove, A. P. *ACS Macro Lett.* **2012**, 1, 1409 - 1412.

Publisher: American Chemical Society (ISI 2012 Impact Factor = n/a);

#39) *Orthogonal Modification of Norbornene-Functional Degradable Polymers.* Williams, R. J.; Barker, I. A.; O'Reilly, R. K.; **Dove, A. P.** *ACS Macro Lett.* **2012**, *1*, 1285–1290.

Publisher: American Chemical Society (ISI 2012 Impact Factor = n/a);

#38) *Nanosponge formation from organocatalytically synthesized poly(carbonate) copolymers* Tempelaar, S.; Stevens, D. M.; **Dove, A. P.**; Harth, E. *ACS Macro Lett.* **2012**, *1*, 915 - 918.

Publisher: American Chemical Society (ISI 2012 Impact Factor = n/a);

#37) *Crystallization Driven Sphere-to-rod Transition of Poly(lactide)-b-Poly(acrylic acid) Diblock Copolymers: Mechanism and Kinetics.* Petzetakis, N. Walker, D. A.; **Dove, A. P.**; O'Reilly, R. K. *Soft Matter* **2012**, *8*, 7408 - 7414.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 3.909);

#36) *Degradable Graft Copolymers by Ring-Opening and Reversible Addition-Fragmentation Chain Transfer Polymerization.* Williams, R. J.; O'Reilly, R. K.; **Dove, A. P.** *Polym. Chem.* **2012**, *3*, 2156 - 2164.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

#35) *Synthesis and Functionalization of Thiol-Reactive Biodegradable Polymers.* Onbulak, S.; Tempelaar, S.; Pounder, R. J.; Gok, O.; Sanyal, R.; **Dove, A. P.**; Sanyal, A. *Macromolecules* **2012**, *45*, 1715 - 1722.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

#34) *Stereocomplexation in Novel Degradable Amphiphilic Block Copolymer Micelles of Poly(ethylene oxide) and Poly(benzyl α -malate).* Pounder, R. J.; Willcock, H.; leong, N. S.; O'Reilly, R. K.; **Dove, A. P.** *Soft Matter.* **2011**, *7*, 10987 - 10993.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 3.909);

33) *Metal-Free Functionalization of Linear Polyurethanes by Thiol-Maleimide Coupling Reactions.* Billiet, L.; Gok, O; **Dove, A. P.**; Sanyal, A.; Nguyen, T.; Du Prez, F. E. *Macromolecules* **2011**, *44*, 7874 - 7878.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

32) *Additive-Free Clicking for Polymer Functionalization and Coupling by Tetrazine–Norbornene Chemistry.* Hansell, C. F.; Espeel, P.; Stamenovic, M. M.; Barker, I. A.; **Dove, A. P.**; Du Prez, F. E.; O'Reilly, R. K. *J. Am. Chem. Soc.* **2011**, *133*, 13828 - 13831.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 10.677);

#31) *Tetrazine-Norbornene Click Reactions to Functionalize Degradable Polymers Derived from Lactide,* Barker, I. A.; Hall, D. J.; Hansell, C. F.; Du Prez, F. E.; O'Reilly, R. K.; **Dove, A. P.** *Macromol. Rapid Commun.* **2011**, *32*, 1362 - 1366.

Publisher: Wiley GMBH (ISI 2012 Impact Factor = 4.929);

#30) *Ring-Opening Polymerization of an O-Carboxyanhydride Monomer Derived from L-Malic Acid* Pounder, R. J.; Fox, D. J.; **Dove, A.P.** *Polym. Chem.* **2011**, *2*, 2204 - 2212.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

***29)** *Synthesis and Post-Polymerization Modification of Maleimide-Functional Polymers by 'Thiol-ene' Click and Diels-Alder Chemistries.* Hall, D. J.; Van Den Berghe, H. M.; **Dove, A.P.** *Polym. Int.* **2011**, 60, 1149 - 1157.

Publisher: Wiley GMBH (ISI 2012 Impact Factor = 2.125);

***28)** *Organocatalytic Synthesis and Postpolymerization Functionalization of Allyl-Functional Poly(carbonate)s.* Tempelaar, S.; Mespouille, L.; Dubois, Ph.; **Dove, A.P.** *Macromolecules* **2011**, 44, 2084 – 2091.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

***27)** *Cylindrical Micelles of Controlled Length from the Crystallization-Driven Self-Assembly of Poly(lactide)-Containing Block Copolymers.* Petzetakis, N. **Dove, A. P.**; O'Reilly, R. K. *Chem. Sci.* **2011**, 2, 955 - 960.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 8.314);

***26)** *Organocatalytic synthesis of astaxanthin-containing poly(lactide)s* Middleton H.; Tempelaar, S.; Haddleton, D. M.; **Dove, A. P.** *Polym. Chem.* **2011**, 2, 595 - 600.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

***25)** *Synthesis of Stereoregular Cyclic Poly(lactide)s via "Thiol-Ene" Click Chemistry.* Stanford, M. J.; Pflughaupt, R. L.; **Dove, A. P.** *Macromolecules* **2010**, 43, 6538 - 6541.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

***24)** *Synthesis and Organocatalytic Ring-Opening Polymerization of Cyclic Esters Derived from L-Malic Acid.* Pounder, R. J.; **Dove, A. P.** *Biomacromolecules* **2010**, 11, 1930 - 1939.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.371);

***23)** *Synthesis of poly(lactide)s with modified thermal and mechanical properties.* Becker, J .M.; Pounder, R . J.; **Dove, A. P.** *Macromol. Rapid Commun.* **2010**, 31, 1923 - 1937.

Publisher: Wiley GMBH (ISI 2012 Impact Factor = 4.929);

***22)** *Development of amino-oxazoline and amino-thiazoline organic catalysts for the ring-opening polymerization of lactide.* Becker, J .M.; Tempelaar, S.; Stanford, M. J.; Pounder, R . J.; Covington, J. A.; **Dove, A. P.** *Chem. Eur. J.* **2010**, 16, 6099 - 6105.

Publisher: Wiley GMBH (ISI 2012 Impact Factor = 5.831);

***21)** *Towards Poly(ester) Nanoparticles: Recent Developments in the Synthesis of Functional Poly(ester)s by Ring-Opening Polymerization.* Pounder, R. J.; **Dove, A. P.** *Polym. Chem.* **2010**, 1, 260 - 271.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 5.231);

***20)** *Stereoselective Ring-Opening Polymerisation of Lactide.* Stanford, M. J.; **Dove, A. P.** *Chem. Soc. Rev.* **2010**, 39, 486 – 494.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 24.892);

***19)** *One-pot synthesis of α,ω -chain end functional, stereoregular, star shaped poly(lactide).* Stanford, M. J.; **Dove, A. P.** *Macromolecules* **2009**, *42*, 141 - 147.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

18) *Propylene Polymerization with Cyclopentadienyltitanium(IV) Hydroxylaminate Complexes.* **Dove, A. P.**; Kieseewetter, E. T.; Ottenwaelder, X.; Waymouth, R. M.; *Organometallics* **2009**, *28*, 405 – 412.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 4.145);

***17)** *Controlled ring-opening polymerisation of cyclic esters: Polymer blocks in self-assembled nanostructures.* **Dove, A. P.** *Chem. Commun.* **2008**, 6446 - 6470.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 6.378);

***16)** *Metal free thiol-maleimide 'Click' reaction as a mild functionalisation strategy for degradable polymers.* Pounder, R. J.; Stanford, M. J.; Brooks, P.; Richards, S. P.; **Dove, A. P.** *Chem. Commun.* **2008**, 5158 - 5161.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 6.378);

15) *Organocatalytic Ring Opening Polymerization of Trimethylene Carbonate.* Nederberg, F.; Lohmeijer, B. G. G.; Leibfarth, F.; Pratt, R. C.; Choi, J.; **Dove, A. P.**; Waymouth, R. M.; Hedrick, J. L. *Biomacromolecules*, **2007**, *8*, 153-160.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.371);

14) *Guanidine and amidine organo-catalysts for ring-opening polymerization of cyclic esters.* Lohmeijer, B. G. G.; Pratt, R. C.; Leibfarth, F.; Logan, J. W.; Long, D. A.; **Dove, A. P.**; Nederberg, F.; Choi, J.; Wade, C.; Waymouth, R. M.; Hedrick, J. L. *Macromolecules*, **2006**, *39*, 8574-8583.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

13) *Exploration, Optimization, and Application of Supramolecular Thiourea-Amine Catalysts for the Synthesis of Lactide (Co)polymers.* Pratt, R. C.; Lohmeijer, B. G. G.; Long, D. A.; Lundberg, P. N. P.; **Dove, A. P.**; Li, H.; Wade, C. G.; Waymouth, R. M.; Hedrick, J. L. *Macromolecules*, **2006**, *39*, 7863-7871.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

12) *Stereoselective polymerization of rac- and meso-lactide catalyzed by sterically encumbered N-heterocyclic carbenes.* **Dove, A. P.**; Li, H.; Pratt, R. C.; Lohmeijer, B. G. G.; Culkin, D. A.; Waymouth, R. M.; Hedrick, J. L. *Chem. Commun.* **2006**, 2881.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 6.378);

11) *Alcohol Adducts of N-Heterocyclic Carbenes: Latent Catalysts for the Thermally-Controlled Living Polymerization of Cyclic Esters.* Coulembier, O.; Lohmeijer, B. G. G.; **Dove, A. P.**; Pratt, R. C.; Mespouille, L.; Culkin, D. A.; Benight, S. J.; Dubois, Ph.; Waymouth, R. M.; Hedrick, J. L. *Macromolecules*, **2006**, *39*, 5617-5628.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 5.521);

10) *Synthetic, Structural, Mechanistic, and Computational Studies on Single-Site β -Diketiminato Tin(II) Initiators for the Polymerization of rac-Lactide.* **Dove, A. P.**;

Gibson, V. C.; Marshall, E. L.; Rzepa, H. S.; White, A. J. P.; Williams, D. J. *J. Am. Chem. Soc.* **2006**, *128*, 9834-9843.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 10.677);

9) *N-Heterocyclic carbenes: Effective organic catalysts for living polymerization.* **Dove, A. P.**; Pratt, R. C.; Lohmeijer, B. G. G.; Culkin, D. A.; Hagberg, E. C.; Nyce, G. W.; Waymouth, R. M.; Hedrick, J. L. *Polymer* **2006**, *47*, 4018-4025.

Publisher: Elsevier (ISI 2012 Impact Factor = 3.379);

8) *Thiourea-Based Bifunctional Organocatalysis: Supramolecular Recognition for Living Polymerization.* **Dove, A. P.**; Pratt, R. C.; Lohmeijer, B. G. G.; Waymouth, R. M.; Hedrick, J. L. *J. Am. Chem. Soc.* **2005**, *127*, 13798-13799.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 10.677);

7) *Latent, thermally activated organic catalysts for the on-demand living polymerization of lactide.* Coulembier, O.; **Dove, A. P.**; Pratt, R. C.; Sentman, A. C.; Culkin, D. A.; Mespouille, L.; Dubois, Ph.; Waymouth, R. M.; Hedrick, J. L. *Angew. Chem., Int. Ed.* **2005**, *44*, 4964-4968.

Publisher: Wiley GMBH (ISI 2012 Impact Factor = 13.734);

6) *Single-component catalyst/initiators for the organocatalytic ring-opening polymerization of lactide.* Csihony, S.; Culkin, D. A.; Sentman, A. C.; **Dove, A. P.**; Waymouth, R. M.; Hedrick, J. L. *J. Am. Chem. Soc.* **2005**, *127*, 9079-9084.

Publisher: American Chemical Society (ISI 2012 Impact Factor = 10.677);

5) *Cyclopentadienyl titanium hydroxylaminate complexes as highly active catalysts for the polymerization of propylene.* **Dove, A. P.**; Xie, X.; Waymouth, R. M. *Chem. Commun.* **2005**, 2152.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 6.378);

4) *Magnesium and zinc complexes of a potentially tridentate β -diketiminato ligand.* **Dove, A. P.**; Gibson, V. C.; Marshall, E. L.; White, A. J. P.; Williams, D. J. *J. Chem. Soc., Dalton Trans.* **2004**, 570-578.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 3.806);

3) *Low coordinate magnesium chemistry supported by a bulky β -diketiminato ligand.* **Dove, A. P.**; Gibson, V. C.; Hornmrun, P.; Marshall, E. L.; Segal, J. A.; White, A. J. P.; Williams, D. J. *J. Chem. Soc., Dalton Trans.* **2003**, 3088-3097.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 3.806);

2) *A well-defined magnesium enolate initiator for the living and highly syndioselective polymerisation of methyl methacrylate.* **Dove, A. P.**; Gibson, V. C.; Marshall, E. L.; White, A. J. P.; Williams, D. J. *Chem. Commun.* **2002**, 1208.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 6.378);

1) *A well defined tin(II) initiator for the living polymerisation of lactide.* **Dove, A. P.**; Gibson, V. C.; Marshall, E. L.; White, A. J. P.; Williams, D. J. *Chem. Commun.* **2001**, 283.

Publisher: Royal Society of Chemistry (ISI 2012 Impact Factor = 6.378);

Patents

1) *Diamido alkoxide complexes as polymerization initiators of lactides*. Gibson, V. C.; Marshall, E. L.; **Dove, A. P.** PCT Int. Appl., **2002**, WO 2002038574

Book chapters

3) *Poly(lactide)s as robust renewable materials*. Becker, J. M.; **Dove, A. P.** in *Green Polymerization Methods: Renewable Starting Materials, Catalysis and Waste Reduction*, Eds Meier, M. A. R.; Mathers, R. T., Wiley, **2011**, 201 - 220.

2) *Metal-free catalysis in ROP*. **Dove, A. P.**, in *Handbook of Ring-Opening Polymerization*, Eds Dubois, Ph.; Degee, Ph.; Coulembier, O.; Raquez, J.-M., Wiley, **2009**, ISBN: 978-3-527-31953-4.

1) *NHCs as Organic Catalysts*. **Dove, A. P.**; Pratt, R. C.; Lohmeijer, B. G. G.; Li, H.; Hagberg, E. C.; Waymouth, R. M.; Hedrick, J. L., in *N-Heterocyclic Carbenes in Synthesis*, Ed. Nolan, S. A., Wiley, **2006**, ISBN: 978-3-527-31400-3.

NATIONAL AND INTERNATIONAL RECOGNITION

Awards, honours and fellowships:

- Royal Society of Chemistry Gibson-Fawcett Award 2014
- Warwick Award for Teaching Excellence (WATE) 2014
- Invited to become Fellow of Royal Society of Chemistry (FRSC) 2014
- Macrogrouop UK Young Researcher Medal Winner 2009
- Royal Society Industry Fellowship 2012 – 2016
- Royal Society of Chemistry JWT Jones Travelling Fellowship 2012
- RCUK Fellowship 2005 - 2010
- CPIMA Postdoctoral Fellowship 2004 - 2005

Presentations at conferences and invited lectures:

2015

- *Invited lecture* in 'Patterning Materials for the Bio-Interface' at ACS National Meeting, Boston, USA (16/08/2015)
- *Invited lecture* in 'Biomacromolecules/Macromolecules Young Investigator Award Symposium' at ACS National Meeting, Boston, USA (17/08/2015)
- *Invited lecture* at the University of Sheffield (14/07/2015)
- *Invited lecture* at 'P2M Conference' in Bordeaux, France (29/05/2015)
- *Invited plenary lecture* at 'Polinnova Conference' in Bansko, Bulgaria (22/05/2015)
- *Invited lecture* at Sheffield Hallam University (13/04/2015)
- *Invited lecture* at Lubrizol Advanced Materials, Brecksville, Ohio, USA (27/03/2015)
- *Invited lecture* in 'Putting Renewable Polymers to Work' at ACS National Meeting, Denver, USA (22/03/2015)
- *Invited lecture* in 'Polymeric Biomaterials' at ACS National Meeting, Denver, USA (24/03/2015)
- *Invited lecture* at 'Biohydrogels Meeting' in Nantes, France (05/03/2015)
- *Invited lecture* at Kings College London (05/02/2015)
- *Invited lecture* at the University of Reading (12/01/2015)
- *Invited lecture* at 'RSC Biomaterials Interest Group annual Meeting' in London (05/01/2015)

2014

- *Invited lecture at '4th Zing Polymer Chemistry Conference' in the Riviera Maya, Mexico (12/2014)*
- *Invited lecture in '7th international symposium on Controlled/Living Radical Polymerization' at ACS National Meeting, San Francisco, USA (13/08/2014)*
- *Invited lecture in 'Advanced Materials Synthesis and Assembly Toward Technology Challenges' at ACS National Meeting, San Francisco, USA (12/08/2014)*
- *Invited lecture in 'Recent Developments in Polymer Synthesis' Symposium, IUPAC World Polymer Congress, Chiang Mai, Thailand (08/07/2014)*
- *Invited lecture at Tongji University, Shanghai, China (04/07/2014)*
- *Invited lecture at Fudan University, Shanghai, China (03/07/2014)*
- *Invited lecture in 'Biomedical Applications based on Degradable, Stimuli-Sensitive Polymers' session at 'CIMTEC 2014' at the Montecatini Terme, Italy (18/06/2014)*
- *Invited lecture at 'Chemical Sciences in the 21st Century: The role of 3D Printing' at Nottingham University (29/04/2014)*
- *Invited lecture in 'International Symposium for Green Materials' at Kamagata University, Japan (24/01/2014)*

2013

- *Invited lecture in 'Applications of Click Chemistry Symposium' at MRS National Meeting, Boston, USA (03/12/2013)*
- *Invited keynote lecture at '21st Bioenvironmental Polymer Society Annual Meeting' at the University of Warwick (20/09/2013)*
- *Invited lecture in 'Hermann Mark young Scholar Symposium' at ACS National Meeting, Indiana, USA (10/09/2013)*
- *Invited lecture at Shanghai Jiao Tong University, Shanghai, China (31/07/2013)*
- *Invited lecture at UK-China Symposium, Zhezhang, China (29/07/2013)*
- *Invited keynote lecture at Frontiers of Polymer Science, Gordon Research Conference, Mount Holyoake, Massachusetts, USA (12/06/2013)*
- *Invited lecture at University of Florida, Gainesville, Florida, USA (24/05/2013)*
- *Invited keynote lecture at 'Advances and Challenges of Sustainable Polymeric Materials' Conference, Tampa, Florida, USA (21/05/2013)*

2012

- *Invited lecture in 'UK-Thailand Materials Workshop' Symposium at Chaing Mai University, Thailand (11/12/2012)*
- *Invited lecture in 'UK-Singapore Materials Workshop' Symposium at Nanyang Technical University, Singapore (07/12/2012)*
- *Invited lecture at Texas A&M University, College Station, Texas, USA (05/09/2012)*
- *Invited keynote lecture in 'Recent Developments in Synthesis' Symposium, IUPAC World Polymer Congress, Virginia Tech, Blacksburg, Virginia, USA (26/06/2012)*
- *Invited lecture at Southern Methodist University, Dallas, Texas, USA (04/06/2012)*
- *Invited lecture at University of Arizona, Tucson, Arizona, USA (01/06/2012)*
- *Invited lecture at Uppsala University, Sweden (03/05/2012)*
- *Invited lecture at Akron University, Akron, Ohio, USA (03/04/2012)*
- *Invited lecture at Case Western Reserve University, Cleveland, Ohio, USA (02/04/2012)*
- *Invited lecture at Lubrizol, Cleveland, USA (30/03/2012)*
- *Invited lecture in 'Next Generation Renewable Polymers' Symposium at 243rd ACS National Meeting, San Diego, USA (29/03/2012)*
- *Invited lecture at University of Texas, Austin, USA (23/03/2012)*

- *Invited lecture* at University of Delaware, Newark, Delaware, USA (05/03/2012)

2011

- *Invited lecture* at Queensland University of Technology, Brisbane, Australia (07/12/2011)
- *Invited lecture* at University of Queensland, Brisbane, Australia (24/11/2011)
- *Invited lecture* at University of Sydney, Sydney, Australia (16/11/2011)
- *Invited lecture* at University of New South Wales, Sydney, Australia (14/11/2011)
- *Invited lecture* at Tongji University, Shanghai, China (28/07/2011)
- *Invited lecture* at Soochow University, Suzhou, China (27/07/2011)
- *Invited lecture* at Unilever, Shanghai, China (26/07/2011)
- *Invited lecture* at Fudan University, Shanghai, China (25/07/2011)
- *Invited lecture* at CSC Canadian Chemistry Conference, Montreal, Canada (07/06/2011)
- *Invited lecture* at Ghent University, Belgium (01/06/2011)
- *Invited poster presentation* at High Polymer Research Group meeting, Pott Shrigley (25/04/2011)
- *Invited lecture* at Unilever, CMD, Liverpool (20/01/2011)
- *Invited lecture* at University of Mons, Belgium (28/01/2011)

2010

- *Invited keynote lecture* at 'Young Researchers Symposium', IUPAC World Polymer Congress, Glasgow (13/07/2010)
- *Invited lecture* at Plaxica (11/05/2010)
- *Invited to present the Inaugural Green Materials Chemistry Lectures* at University of Prince Edward Island, Canada (29/03/2010 – 01/04/2010)
- *Invited lecture* at 'Nanostructured Materials from Supramolecular Interactions' Symposium, ACS National Meeting, San Francisco, USA (22/03/2010)
- *Invited lecture* at 'PMSE Young Investigator Symposium', ACS National Meeting, San Francisco, USA (21/03/2010)
- *Invited lecture* at Royal Society of Chemistry Biomaterials Group Annual Meeting, Duhram (13/01/2010)

2009

- *Invited lecture* at Chroma Therapeutics (16/12/2009)
- *Invited lecture* at Universite Paul Sabatier, Toulouse (12/11/2009)
- *Invited lecture* at University of Wales, Bangor (10/11/2009)
- Lecture and poster presentation at Recent Appointees in Polymer Science meeting, Reading (17/09/2009)
- *Invited lecture* at University of Bristol (28/07/2009)
- Lecture in 'Degradable polymers: From synthesis to nanotechnology' Symposium, ACS National Meeting, Salt Lake City, USA (24/03/2009)

2008

- *Invited to give Royal Society of Chemistry Lecture*, University of Warwick (02/10/2008)
- *Invited lecture* at Infineum (12/11/2008)
- Poster presentation at Recent Appointees in Polymer Science meeting, Nottingham (21/09/2008)

- *Invited lecture* at 'Functional Nano-Materials from New Polymer Synthetic Methodologies' Symposium, ACS National Meeting, New Orleans, USA (07/04/2008)
- *Invited lecture* at East-Midlands Organic Division Meeting, Sheffield (26/03/2008)
- *Invited lecture* at Zing Conference on Polymer Synthesis, Cancun, Mexico (20/03/2008)

2007

- *Invited lecture* at Leverhulme Symposium, University of Bath (07/11/2007)
- Poster presentation at STIPOMAT meeting, Les Diablerets, Switzerland (16/10/2007)
- Lecture and poster presentation at Recent Appointees in Polymer Science meeting, Cambridge (20/09/2007)
- *Invited lecture* at UK Polymer Colloids Forum International Conference, Warwick (18/09/2007)
- Lecture at 'Sustainable polymers' Symposium, ACS National Meeting, Boston, USA (20/08/2007)
- *Invited lecture* at Imperial College, London (07/06/2007)

2006

- *Invited lecture* at University of Mons-Hainaut, Belgium (17/11/2006)
- *Invited lecture* at Warwick International Conference on Polymer Synthesis (03/08/2006)
- *Invited participant and lecturer* at EPSRC-RSC-NSF 'The Synthesis of Complex Chemical Systems' workshop, Oxford (21/03/2006)

Other Esteem Indicators:

- *Editorial Advisory Board* of 'Biomaterials Science' journal (**2012** – present).
- *Associate Editor* of 'Green Materials' journal (**2012** – present).
- *Review Editor* of 'Frontiers' journal (**2013** – present).
- *Visiting Scholar* at Texas A&M University, USA (**2012**)
- *Visiting Scholar* at University of Queensland, Australia (**2011**)
- *Visiting Professor of Green Materials* at University of Prince Edward Island (**2009**)
- Invited discussion leader at 'Frontiers in Polymer Science' Gordon Research Conference (June **2011**).
- *Advisory committee member* for Assiut International Center of Nanomedicine, Egypt (**2012** – present).
- *Invited guest editor* for Macromolecular Chemistry and Physics 'Step-growth polymerization' special themed issue **2013**.
- *Invited guest editor* for Polymer Chemistry 'Emerging Investigators' themed issue **2010**.
- Panel member EPSRC Chemistry prioritisation panel, March **2008**.
- Panel member EPSRC Materials prioritisation panels, February **2012**; February **2013**.
- Elected as Bulletin officer of Macro group UK (April **2007** - **2011**)
- Elected as membership officer of Recent Appointees in Polymer Science network (Sept **2006** - **2009**)
- Invited external expert reviewer for ARC (Australia), (ISF) Israel, ACS (USA) and ANR (France) funding agencies.
- Regularly invited to review of papers for numerous journals including *ACS Macro Letters*; *Acta Biomaterialia*, *Angew. Chem. Int. Ed.*; *J. Am. Chem. Soc.*; *J. Polym. Sci.: Part A Polym. Chem.*; *Macromolecules*; *Biomacromolecules*; *Dalton Trans.*;

*Chem. Eur. J.; Eur. Polym. J.; Eur. J. Inorg. Chem.; Chem. Soc. Rev.; Soft Matter.,
Chem. Commun, Nature Commun and Nature Chem.*

Date Curriculum Vitae Prepared: 27th August 2015