

Professor Dr. Eva Hevia

1. Personal Information

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	http://www.evaheviagroup.com	

2. Education

1998 - 2002 Ph. D. (Cum Laude) Universidad de Oviedo, Spain, "*New aspects of the organometallic chemistry of the rhenium and manganese tricarbonyl complexes with bidentate N-donor ligands*". Advisors: Professor Víctor Riera and Dr. Julio Pérez.

1994 - 1998 M. Sc. in Chemistry. Universidad de Oviedo (Spain).

3. Employment History

2019 - present Full Professor of Inorganic Chemistry, University of Bern, Switzerland.

2013 - 2019 Full Professor of Inorganic Chemistry, University of Strathclyde, UK.

2011 - 2013 Reader in Inorganic Chemistry, University of Strathclyde, UK.

2010 - 2011 Senior Lecturer, University of Strathclyde, UK.

2006 - 2010 Lecturer, Department of Pure and Applied Chemistry, University of Strathclyde, UK.

2006 Ramón y Cajal Senior Research Fellow, Universidad de Oviedo.

2003 - 2006 Postdoctoral Research Fellow (most of the time as an EU Marie Curie Fellow) University of Strathclyde, UK. Advisor: Professor R. E. Mulvey.

4. Honours and Awards

2023 **Seyferth Lecture in Organometallics**, Massachusetts Institute of Technology (MIT), Cambridge, USA.

2021 **GDCH Arfvedson-Schlenk Prize** Awarded biannually by the German Chemical Society (GDCh) for outstanding contributions to advancing the chemistry of lithium.

2021 **RSEQ Excellence Research Award in Chemistry**. Awarded by the Spanish Royal Society of Chemistry for an outstanding track record in research in any area of chemistry.

2019 **GEQO-RSEQ Excellence Research Award in Organometallic Chemistry**. Awarded by the Organometallic Division of the Spanish Royal Society of Chemistry to recognise the uniqueness, importance and originality of her work in the organometallic chemistry of the main group elements

2017 **RSC Corday-Morgan Prize**. Awarded by the Royal Society of Chemistry (RSC) for the most meritorious contributions to chemistry in the UK

2016 **Emerging Talent SRUK/CERU Award**. Awarded by the Society of Spanish Researchers in the UK and the Santander Foundation to recognise the scientific contributions of the most promising Spanish researcher under 40 years of age.

2011 **RSEQ- Emerging Investigator Award**. awarded by the Spanish Royal Society of Chemistry to recognise the scientific contributions of the most promising members under 36 years of age.

2009 **RSC Harrison-Meldola Memorial Medal and Prize**. awarded by the RSC for the most meritorious and promising original investigations published in chemistry by a scientist aged 32 or below.

2006 - 2014 **Royal Society University Research Fellowship**, University of Strathclyde (UK). Note that these fiercely competitive UK awards are given to those candidates with greatest potential to become international leaders in their field and approximately only 30 positions are funded per year across all scientific and engineering disciplines with only a 5% average success rate overall).

2006 **Ramón y Cajal Fellowship**, Universidad de Oviedo (Spain). Sponsored by the Spanish Research Council, this targets the most promising young researchers starting their independent careers.

5. Approved Projects > €5 M in funding as Principal Investigator since 2011

2023-2025	€255k	SNF (TMPFP2_21608/!) Tailoring Alkali-Metal Ferrates for Chemical Cooperativity
2020-2024	€856k	SNF (200021_188573) <i>Sustainable Synthesis and Catalysis Through Earth-Abundant Cooperative Bimetallics</i>
2019 – 2022	€648k	EPSRC (EP/S029788/1) <i>Bespoke Bimetallics for Chemical Cooperativity</i>
2019 - 2022	€479k	EPSRC (EP/S020837/1) <i>Enabling Industrial deployment of DES through manufacturing tools</i>
2016 - 2019	€362k	Janssen Pharmaceutica <i>Developing Zn reagents for glycosylation reactions</i>
2015 - 2019	€439k	EPSRC (EP/N011384/1) <i>Towards a Paradigm Shift in the Principles and Practice of Polar Organometallic Chemistry</i>
2012 - 2017	€1.495M	FP7 European Research Council Starting Grant: <i>MixMetApps</i>
2011 - 2014	€450k	Royal Society Research Fellowship extension

6. Supervision of junior researchers at graduate and postgraduate level

Advisor, current	8 Ph.D students, 3 postdoctoral researchers 4 final year M.Sc. students, 1 international visitor
Past	13 Ph.D students (9 currently in industry, 4 in education) 15 postdoctoral researchers (5 in academia, 9 in industry, 1 in education) >30 B.Sc. and M.Sc students and >15 international short term visitors (3–6 months)

7. Publication Track Record

EH has published **172 peer-reviewed papers**. Most of these papers have appeared in the highest impact, highest profile general chemistry journals including **37** papers in *Angewandte Chemie*, **8** in the *Journal of the American Chemical Society*, **10** in *Chemical Science*, **27** in *Chemical Communications* and one article in the acclaimed multidisciplinary science journal *PNAS*). Her **H-index is 43** (total number of citations 5497, WoS). See Appendix with full list of publications.

8. Invited Talks

Over **130 invited seminars** worldwide (see personal website <http://www.evaheviagroup.com> for full list), including several plenary and keynote contributions at international conferences and invited talks in European Universities and in chemical companies (Pfizer, GSK, Janssen and Lilly). A selection of more recent presentations is listed below:

- 1 Plenary Speaker** at SCQ Inorganic and Organometallic Meeting, Barcelona, Spain, February 2023.
- 2 Plenary Speaker**, at International Symposium on Innovative Reactions through Controlling Electrons (ISIRCE), Nara, Japan, November 2022
- 3 Invited Speaker** at The Batsheva de Rothschild seminar on Strong Bond Activation, Israel, October 2022
- 4 Plenary Speaker** at Italian Inorganic Chemistry Conference, INORG2022, Pisa, Italy, September 2022.
- 5 Invited Speaker** at International Conference on Coordination Chemistry (ICCC 2022), Rimini, Italy, August 2022.
- 6 Invited Speaker** at Gordon Research Conference Green Chemistry, Castelldefels, Spain, July 2022.
- 7 Keynote Speaker** at 9th International Conference on Organometallic Chemistry (ICOMC), Prague, Czech Republic, July 2022.
- 8 Invited Speaker** at Canadian Chemistry Conference and Exhibition (CCCE 2022), Calgary, Canada, June 2022.
- 9 Invited Speaker** at Element-Ligand Cooperativity: Unifying the concepts from d-block and p-block chemistry Symposium, Heidelberg, Germany, April 2022.
- 10 Keynote Speaker** at Chemistry at the Frontier Symposium, CIQUS, Santiago de Compostela, Spain, April 2022.

9. Memberships of panels, boards and reviewing activities

Since 2024	Committee Member for Arfvedson-Schlenk Prize (GDCh)
Since 2023	Member of International Advisory Board of <i>Synthesis</i> (Thieme)
2022	Panel Member PE5, ERC-Advance Grant, European Commission

2022	Panel Member SNF Starting Grant (Swiss National Foundation)
Since 2022	Editor in Chief of <i>Helvetica Chimica Acta</i> .
2021	Panel member of Chemical Sciences and Technology Committee, Agencia Estatal de Investigación (Spain)
2021	Panel member of Inorganic, Materials and Organic Chemistry Committee of the VR Research Council (Sweden).
2021	Guest editor of themed issue in <i>Chem. Soc. Rev.</i> on the reactivity of Main Group Elements
Since 2021	Member of international advisory board of <i>Chem. Catalysis</i>
Since 2020	Member of the Board of Fundamental Research of the Swiss Chemical Society
Since 2020	Member of International Advisory Board of <i>Organometallics</i>
Since 2020	Elected Member of RSC Dalton Council
2017 - 2019	Member of the RSC Dalton Division Awards Committee (UK).
2015 - present	Member of the international advisory board of <i>Eur. J. Inorg. Chem.</i>
2019 - 2022	Member of the Earth Sciences and Chemistry Committee for admission in the National Academy of Scotland (RSE)
2018 - 2020	Associate Editor of <i>Royal Society Open Science</i> .
2015 - 2018	Consultant for Janssen Pharmaceutica, Beerse, Belgium .
2016 - 2021	Member of the Royal Society evaluation committee in Physical Sciences for the RS University Research Fellowship Scheme (UK).
2016	Panel member of Equality Charter Unit for Athena SWAN applications (UK).
2014	Guest editor of themed issue in Dalton Transactions (Polar Organometallic Chemistry), reviewer for journals: ACS, RSC, Wiley, Elsevier, Science, and Nature; for funding agencies: EPSRC (UK), Royal Society (UK), AEI (Spain), ISF (Israel), ANR (France), FP7/H2020 Europe, SFI (Ireland), NSC (Poland) and VR (Sweden)
2019 - 2021	External Examiner for Undergraduate Studies at the University of Bath.
External examiner for > 25Ph.D degrees UK, (Cambridge, Oxford, Heriot-Watt, Bath, Manchester, St Andrews, Edinburgh, Imperial College), Spain (Oviedo, Sevilla, Alcalá de Henares, Autónoma de Madrid, Huelva, Almería, A Coruña), Switzerland (EPFL, Bern), Norway (Stavanger) and Ireland (University College Dublin).	

10. Active memberships in scientific societies, fellowships, in renowned academies

2020- present	Member of Swiss Chemical Society (SCS).
2019-present	Elected Fellow European Academy of Sciences (EurASc).
2018- present	Elected Fellow of the Royal Society of Edinburgh (Scotland's National Academy).
2011 - present	Member of AcademiaNet (European network of female scientists).
2010 - present	Member of the Royal Society of Chemistry (Fellow since 2013).
2010 - present	Member of the Spanish Royal Society of Chemistry (RSEQ).

11. Organisation of conferences

2021	Chair of Swiss Chemical Society Fall Meeting in Bern (Switzerland)
2020	Co-chair of EUCOMC XV to take place in August 2023 in Bern (Switzerland)
2019	Co-chair of UK-Spain Organometallic Chemistry Symposium (USCOCS 2019), Alcalá de Henares (Spain)
2016	Co-organiser of Universities of Scotland Inorganic Chemistry Conference (USIC 2016), University of Strathclyde, UK.

12. Career breaks

22/12/2011-02/05/2012	Maternity leave, birth of 1 st daughter Lucia on 23/12/2011.
03/01/2016-02/06/2016	Maternity leave, birth of 2 nd daughter Marina on 03/01/2016.

13. Recent Outreach activities

- Panellist in RSC Round Table on the Role of Critical Raw Materials in reaching Net-Zero Emissions (May 2021)
- Eva Participant of Royal Society of Edinburgh (RSE) Women in Science Exhibition (April 2019).
- Euroscience Open Forum (ESOF) 2018, Toulouse, “European Grants for brilliant minds from across the world,” Invited Speaker (9th-14th July 2018).
- Talks at Woodside Primary School and St Aloysius High (Glasgow), Pathways to a Career in Science (Feb 2018, Oct 2018).
- Public lecture at Science UK, 2017, Madrid, Fundación Ramón Areces (17th Nov 2017).
- Public lecture at International Day of Women and Girls in Science Event, Glasgow (1st Feb 2017).
- Contributor to “*Academic Women Now: experiences of mid-career academic women in Scotland*”, booklet edited by the Young Academy of Scotland.

14. Recent Institutional Responsibilities

2023	Chair of recruitment committee for a Tenure-Trak Assistant Professor position, Department of Chemistry, Biochemistry and Pharmaceutical Sciences, University of Bern
2020-2022	Panel Member of Habilitations Committee for the Faculty of Science, University of Bern
2021	Panel Member of Recruitment Committee for new professorial position in the Department of Mathematics, Faculty of Science, University of Bern.
2017 – 2019	International Exchanges Coordinator, Department of Pure & Applied Chemistry, University of Strathclyde, Glasgow, UK.
2017 – 2019	Member of Teaching Committee, Department of Pure & Applied Chemistry, University of Strathclyde, Glasgow, UK.
2016 – 2019	Member of Operations Committee, Department of Pure & Applied Chemistry, University of Strathclyde, Glasgow, UK.
2015 – 2019	Member of the Equality and Diversity Strategy Committee, Faculty of Science, University of Strathclyde, Glasgow, UK.
2014 – 2019	Chair of Athena SWAN Committee for gender equality and diversity, Department of Pure & Applied Chemistry, University of Strathclyde, Glasgow, UK.
2010 – 2016	Member of the Internationalisation Committee, Department of Pure & Applied Chemistry.

15 Major International Collaborations

Applications for Drug discovery: Dr. Vittorio Farina (Janssen Pharmaceutica, Belgium) and Dr. Javier Gonzalez Sabin (EntreCHEM, Spain)

Applications of Polar Organometallics: Prof. Paul Knochel (Ludwig-Maximilians Universität, München, Germany) and Prof. Robert E. Mulvey (University of Strathclyde UK)

Magnetic properties, SQUID and EPR measurements: Prof. Karsten Meyer (Friedrich-Alexander Universität, Erlangen, Germany), Dr. Guillem Aromi (Universitat de Barcelona, Spain) and Professor Eva Rentschler (Universität Mainz, Germany).

Green Chemistry: Dr. Joaquin Garcia-Alvarez (Universidad de Oviedo, Spain), Professor Vito Capriati (Universita di Bari, Italy).

Flow Chemistry: Professor Karen Edler (Bath University, UK) and Dr. Laura Torrente (University of Cambridge, UK)

Theoretical calculations: Dr. Max Garcia-Melchor (Trinity College Dublin, Ireland), Dr. Simon Grabowski (University of Bern, Switzerland)

Electron-spray ionization mass-spectrometry (ESI-MS) studies: Professor Konrad Koszinowski (Georg-August Universität Göttingen, Germany).

Complete List of Publications

- 172.** *Applying Na/Co(II) Bimetallic Partnerships to Promote Multiple Co–H Exchanges in Polyfluoroarenes*, A. Logallo, E. Hevia, *Chem. Commun.*, **2023**, accepted article, 10.1039/D3CC01216F
- 171.** *Alkali-Metal-Alkoxide Powered Zincation of Fluoroarenes Employing Zinc Bis-Amide Zn(TMP)₂*, N. R. Judge, E. Hevia, *Angew. Chem. Int. Ed.* **2023**, 62, e202303099.
- 170.** *Structural and synthetic insights into the chemistry of lithium tetraorganozincates*, A. M. Borys, M. Dell’Aera, V. Capriati, E. Hevia, *Adv. Organomet. Chem.* **2023**, in press, 10.1016/bs.adomc.2022.11.001
- 169.** *Structural and synthetic insights on oxidative homocouplings of alkynes mediated by alkali-metal manganates*, P. Mastropierro, A. W. J. Platten, A. R. Kennedy, E. Hevia, M. Uzelac, *Chem. Eur. J.*, **2023**, 29, e202300593.
- 168.** *Highly Reactive Hydrocarbon Soluble Alkylsodium Reagents for Benzylic Aroylation of Toluenes using Weinreb Amides*, D. E. Anderson, A. Tortajada, E. Hevia, *Angew. Chem. Int. Ed.* **2023**, 62, e202300593.
- 167.** *Diphenylacetylene Stabilised Alkali-Metal Nickelates: Synthesis, Structure and Catalytic Applications* A. M. Borys, E. Hevia, *Dalton Trans.* **2023**, 52, 2098.
- 166.** *Continuous, stable, and safe organometallic reactions in flow at room temperature assisted by deep eutectic solvents*, F. F. Mulks, B. Pinho, A. W.J. Platten, M. R. Andabili, A. J. Expósito, K. J. Edler, E. Hevia, L. Torrente-Murciano, *Chem* **2022**, 8, 3382.
- 165.** *Building Square Planar Cobalt (II) Complexes via Sodium Mediated Cobaltation of Fluoroarenes*, A. Logallo, M. Mu, M. García-Melchor, E. Hevia, *Angew. Chem. Int. Ed.* **2022**, 61, e202213246.
- 164.** *Perdeuteration of Arenes via Hydrogen Isotope Exchange Catalyzed by the Superbasic Sodium Amide Donor Species NaTMP·PMDETA*, A. Tortajada, E. Hevia, *J. Am. Chem. Soc.*, **2022**, 144, 20237.
- 163.** *Exploiting Coordination Effects for the Regioselective Zincation of Diazines Using TMPZnX·LiX (X = Cl, Br)*, A. Kremsmair, A. S. Sunagatullina, L. J. Bole, P. Mastropierro, S. Graßl, H. R. Wilke, E. Godineau, E. Hevia, P. Knochel, *Angew. Chem. Int. Ed.* **2022**, 61, e202210491.
- 162.** *Heavy Alkali Metal Manganate Complexes: Synthesis, Structures and Solvent-Induced Dissociation Effects*, G. M. Ballmann, T. X. Gentner, A. R. Kennedy, E. Hevia, R. E. Mulvey, *Chem. Eur. J.* **2022**, e202201716.
- 161.** *Towards Hexagonal Planar Nickel: A Dispersion-Stabilised Tri-Lithium Nickelate*, A. M. Borys, L. A. Malaspina, S. Grabowsky, E. Hevia, *Angew. Chem. Int. Ed.* **2022**, 61, e202209797.
- 160.** *Gram-Scale Synthesis, Isolation and Characterisation of Sodium Organometallics: nBuNa and NaTMP*, A. Tortajada, D. E. Anderson, E. Hevia, *Helv. Chim. Acta*, **2022**, 105, e202200060.
- 159.** *Enhancing Metalating Efficiency of the Sodium Amide NaTMP in Arene Borylation Applications*, L. J. Bole, A. Tortajada, E. Hevia, *Angew. Chem. Int. Ed.* **2022**, 61, e202204262.
- 158.** *Alkali Metal Metal(ates) Containing Divalent Earth Abundant Transition Metals*, A. Logallo, E. Hevia, *Chimia*, **2022**, 76, 336.
- 157.** *Unmasking the constitution and bonding of the proposed lithium nickelate “Li₃NiPh₃(solvent)₃”: revealing the hidden C₆H₄ ligand*, R. J. Somerville, A. M. Borys, M. Perez-Jimenez, A. Nova, D. Balcells, L. A. Malaspina, S. Grabowsky, E. Carmona, E. Hevia, J. Campos, *Chem. Sci.* **2022**, 13, 5268.

- 156.** *Mechanisms of the Nickel-Catalysed Hydrogenolysis and Cross-Coupling of Aryl Ethers*, A. M. Borys, E. Hevia, *Synthesis*, **2022**, 54, 2976.
- 155.** *Metalation of Sensitive Fluoroarenes using a Potassium TMP-Zincate Supported by a Silyl(bis)amido Ligand*, P. Mastropierro, A. R. Kennedy, E. Hevia, *Chem. Commun.* **2022**, 58, 5292.
- 154.** *Activation of polar organometallic reagents with alkali–metal alkoxides*; L. J. Bole, E. Hevia, *Nature Synthesis*, **2022**, 1, 195.
- 153.** *Hydrophosphinylation of Styrenes Catalysed by Well-Defined s-Block Bimetallics*, A. W. J. Platten, A. M. Borys, E. Hevia, *ChemCatChem* **2022**, 14, e202101853.
- 152.** *Assessing Alkali-Metal Effects in the Structures and Reactivity of Mixed-Ligand Alkyl/Alkoxide Alkali-Metal Magnesiates*, N. R. Judge, L. J. Bole, E. Hevia, *Chem. Eur. J.* **2022**, 28, e2021041.
- 151.** *Structural and Synthetic Insights into Sodium-Mediated-Ferration of Fluoroarenes*, L. C. H. Maddock, A. R. Kennedy, E. Hevia, *Helv. Chim. Acta*, **2021**, 104, e202100206.
- 150.** *Regioselective Synthesis of 1,5-Disubstituted 1,2,3-Triazoles Catalyzed by Cooperative s-Block Bimetallics*, M. De Tullio, A. M. Borys, A. Hernán-Gómez, A. R. Kennedy, E. Hevia, *Chem Catalysis*, **2021**, 1, 1308.
- 149.** *The Anionic Pathway in Nickel-Catalysed Cross-Coupling of Aryl Ethers*, A. M. Borys, E. Hevia, *Angew. Chem. Int. Ed.* **2021**, 60, 24659.
- 148.** *Atom-efficient transition-metal-free arylation of N,O-acetals using diarylzinc reagents through Zn/Zn cooperativity*, A. M. Borys, J. M. Gil-Negrete, E. Hevia, *Chem. Commun.* **2021**, 57, 8905.
- 147.** *Exploiting chemical cooperativity in main-group bimetallic catalysis*, A. M. Borys, E. Hevia, *Trends Chem.* **2021**, 3, 803.
- 146.** *Lateral Metallation and Redistribution Reactions of Sodium Ferrates Containing Bulky 2,6-Diisopropyl-N-(trimethylsilyl)anilide Ligands*, L. C. H. Maddock, R. Morton, A. R. Kennedy, E. Hevia, *Chem. Eur. J.* **2021**, 27, 15181.
- 145.** *Advancing Air- and Moisture-Compatible s-Block Organometallic Chemistry Using Sustainable Solvents*, S. E. García-Garrido, A. Presa Soto, E. Hevia, J. García-Álvarez, *Eur. J. Inorg. Chem.* **2021**, 3116.
- 144.** *Progressing the Frustrated Lewis Pair Abilities of N-Heterocyclic Carbene/GaR₃ Combinations for Catalytic Hydroboration of Aldehydes and Ketones*, L. J. Bole, M. Uzelac, A. Hernán-Gómez, A. R. Kennedy, C. T. O’Hara, E. Hevia, *Inorg. Chem.* **2021**, 60, 13784.
- 143.** *Facilitating the Ferration of Aromatic Substrates through Intramolecular Sodium Mediation*, L. C. H. Maddock, M. Mu, A. R. Kennedy, M. Garcia-Melchor, E. Hevia, *Angew. Chem. Int. Ed.* **2021**, 60, 15296
- 142.** *Alkali Metal (Li, Na, K, Rb, Cs) Mediation in Magnesium Hexamethyldisilazide [Mg(HMDS)₂] Catalysed Transfer Hydrogenation*, T. X. Gentner, E. Hevia, R. E. Mulvey, *ChemCatChem.* **2021**, 13, 2371.
- 141.** *Untangling the Complexity of Mixed Lithium/Magnesium Alkyl/Alkoxy Combinations Utilised in Br/Mg Exchange Reactions*, L. J. Bole, N. R. Judge, E. Hevia, *Angew. Chem. Int. Ed.* **2021**, 60, 7626.
- 140.** *Exploiting deprotonative co-complexation to access potassium metal(ates) supported by a bulky silyl(bis)amide ligand*, P. Mastropierro, A. R. Kennedy, E. Hevia, *Eur. J. Inorg. Chem.* **2021**, 1016.
- 139.** *Beyond Ni{N(SiMe₃)₂}₂: Synthesis of a Stable Solvated Sodium Tris- Amido Nickelate*, A. M. Borys, E. Hevia, *Organometallics*, **2021**, 40, 442.

- 138.** *Tandem Mn-I exchange and homocoupling processes mediated by a synergistically operative lithium manganate*, M. Uzelac, P. Mastropiero, M. de Tullio, I. Borilovic, M. Tarres, A. R. Kennedy, G. Aromí, E. Hevia, *Angew. Chem. Int. Ed.* **2021**, *60*, 3247.
- 137.** *Main Group Bimetallic Partnerships for Cooperative Catalysis*, J. M. Gil-Negrete, E. Hevia, *Chem. Sci.* **2021**, *12*, 1982.
- 136.** *Regioselective Bromine/Magnesium-Exchange for Selective Functionalization of Polyhalogenated Aromatics and Heterocycles*, A. Desaintjean, T. Haupt, L. J. Bole, N. R. Judge, E. Hevia, P. Knochel, *Angew. Chem. Int. Ed.* **2021**, *60*, 1513.
- 135.** *Lithium-mediated Ferration of Fluoroarenes*, L.C. H. Maddock, A. R. Kennedy, E. Hevia, *Chimia*, **2020**, *74*, 866.
- 134.** *Towards a Paradigm Shift in Polar Organometallic Chemistry*, E. Hevia, *Chimia*, **2020**, *74*, 681.
- 133.** *Ambient Moisture Accelerates Hydroamination Reactions of Vinylarenes with Alkali-Metal Amides under Air*, F. F. Mulks, L. J. Bole, L. Davin, A. Hernán-Gómez, A. R. Kennedy, J. García-Álvarez, E. Hevia, *Angew. Chem. Int. Ed.* **2020**, *59*, 19021.
- 132.** *Combination of Organocatalytic Oxidation of Alcohols and Highly-Polar Organometallic Chemistry (RLi) in Aqueous Media, at Room Temperature and Under Aerobic Conditions*, D. Elorriaga, M. J. Rodríguez-Álvarez, N. Ríos-Lombardía, F. Morís, A. Presa Soto, J. González-Sabín, E. Hevia, J. García-Álvarez, *Chem. Commun.*, **2020**, *56*, 8932.
- 131.** *Structurally Mapping Alkyl and Amide Basicity in Zincate Chemistry: Di-versity in the Synthesis of Mixed Sodium-Zinc Complexes and their Applications in Enolate Formation*, P. Mastropiero, Z. Livingstone, S. D. Robertson, A. R. Kennedy, E. Hevia, *Organometallics*, **2020**, *39*, 4273.
- 130.** *Ultrafast Amidation of Esters using Lithium Amides under Aerobic Ambient Temperature Conditions in Sustainable Solvents*, M. Fairley, L. J. Bole, F. F. Mulks, L. Main, A. R. Kennedy, C. T. O'Hara, J. Garcia-Alvarez, E. Hevia, *Chem. Sci.*, **2020**, *11*, 6500
- 129.** *A regioselectively 1,1',3,3'-tetrazincated ferrocene complex displaying core and peripheral reactivity*, G. W. Honeyman, D. R. Armstrong, W. Clegg, E. Hevia, A. R. Kennedy, D. L. Ramsay, R. E. Mulvey, J. A. Parkinson, S. A. Orr, R. McLellan, S. D. Robertson, S. Towie, *Chem. Sci.* **2020**, *11*, 6510.
- 128.** *Boosting Conjugate Addition to Nitroolefins Using Lithium Tetraorganozincates: Synthetic Strategies and Structural Insights*, M. Dell'Aera, F. M. Perna, P. Vitale, A. Altomare, A. Palmieri, L. C. H. Maddock, L. J. Bole, A. R. Kennedy, E. Hevia, V. Capriati, *Chem. Eur. J.* **2020**, *26*, 8742
- 127.** *Preparation of Polyfunctional Arylzinc Organometallics in Toluene by Halogen/Zinc Exchange Reactions*, M. Balkenhohl, D. S. Ziegler, A. Desaintjean, L. J. Bole, A. R. Kennedy, E. Hevia, P. Knochel, *Angew. Chem. Int. Ed.*, **2019**, *58*, 12898. (VIP article).
- 126.** *s-Block cooperative catalysis: alkali metal magnesiate-catalysed cyclisation of alkynols*, M. Fairley, L. Davin, A. Hernan-Gomez, J. Garcia-Alvarez, C. T. O'Hara, E. Hevia, *Chem. Sci.* **2019**, *10*, 5821.
- 125.** *Molybdenum and rhenium carbonyl complexes containing thiolato ligands*, P. Cañadas, S. Ziegler, S. Fombona, E. Hevia, D. Miguel, J. Pérez, L. Riera, *J. Organomet. Chem.* **2019**, *896*, 113. (Invited contribution to special edition in memoriam to Prof. Pascual Royo)
- 124.** *Organolithium Initiated Polymerization of Olefins in Deep Eutectic Solvents under Aerobic Conditions. Sustainable Route to Homopolymers, Random Copolymers and Block Copolymers*, A. Sánchez-Condado, G. A. Carriedo, A. Presa Soto, M. J. Rodríguez-Álvarez, J. García-Álvarez, E. Hevia, *ChemSusChem*, **2019**, *12*, 3134.

- 123.** *Alkali-Metal and Stoichiometric Effects in Intermolecular Hydroamination Catalysed by Lithium, Sodium and Potassium Magnesiates*, L. Davin, A. Hernán-Gómez, C. McLaughlin A.R. Kennedy, R. McLellan, E. Hevia, *Dalton Trans*, **2019**, 48, 8122.
- 122.** *Magnesium-Mediated Arylation of Amines via C-F Bond Activation of Fluoroarenes*, L. J. Bole, L. Davin, A.R. Kennedy, R. McLellan, E. Hevia, *Chem. Commun.*, **2019**, 55, 4339.
- 121** *Alkali Metal Effects in Trans-Metal-Trapping (TMT): Comparing LiTMP with NaTMP in Cooperative MTMP/Ga(CH₂SiMe₃)₃ Metalation Reactions*, R. McLellan, M. Uzelac, L. J. Bole, J. María Gil-Negrete, D. R. Armstrong, A. R. Kennedy, R. E. Mulvey, E. Hevia, *Synthesis*, **2019**, 51, 1207 (Feature Article for 50th Anniversary Golden issue).
- 120.** *The Future of Polar Organometallic Chemistry Written in Bio-Based Solvents and Water*, J. Garcia-Alvarez, E. Hevia, V. Capriati, *Chem. Eur. J.* **2018**, 24, 14854 (Concept Article).
- 119.** *Exploiting Synergistic Effects in Organozinc Chemistry for Direct Stereoselective C-Glycosylation Reactions at Room Temperature*, A. Hernán-Gómez, S. A. Orr, M. Uzelac, A. R. Kennedy, S. Barroso, X. Jusseau, S. Lemaire, V. Farina, E. Hevia, *Angew. Chem. Int. Ed.* **2018**, 57, 10630 (VIP article).
- 118.** *Structural and Synthetic Insights into Pyridine Homocouplings Mediated by a β -Diketiminato Magnesium Amide Complex*, L. A. Davin, W. Clegg, A. R. Kennedy, M. R. Probert, R. McLellan, E. Hevia, *Chem. Eur. J.* **2018**, 24, 14830.
- 117.** *Molecular Manipulations of a Utility Nitrogen-Heterocyclic Carbene by Sodium Magnesiato Complexes and Transmetalation Chemistry with Gold Complexes*, A. Hernán-Gómez, M. Uzelac, S. E. Baillie, D. R. Armstrong, A. R. Kennedy, M. Á. Fuentes, E. Hevia, *Chem. Eur. J.* **2018**, 24, 10541.
- 116.** Donor-influenced structure-activity correlations in stoichiometric and catalytic reactions of lithium monoamido-monohydrido-dialkylaluminates. R. E. Mulvey, J. Okuda, L. E. Lemmerz, R. McLellan, N. R. Judge, A. R. Kennedy, S. Orr, M. Uzelac, E. Hevia, S. D. Robertson. *Chem. Eur. J.* **2018**, 24, 9940.
- 115.** Polar organometallic strategies for regioselective C–H metallation of N-heterocyclic carbenes. M. Uzelac, E. Hevia, *Chem. Commun.* **2018**, 54, 2455 (Feature Article)
- 114.** *Lithium diamidodihydridoaluminates: bimetallic cooperativity in catalytic hydroboration and metallation applications*. V. A. Pollard, S. A. Orr, R. McLellan, A. R. Kennedy, E. Hevia, R. E. Mulvey, *Chem. Commun.* **2018**, 54, 1233.
- 113.** *Introducing Glycerol as a Sustainable Solvent to Organolithium Chemistry: Ultrafast Chemoselective Addition of Aryllithium Reagents to Nitriles under Air and at Ambient Temperature*. M. J. Rodriguez-Alvarez, J. Garcia-Alvarez, M. Uzelac, M. Fairley, C. T. O'Hara, E. Hevia, *Chem. Eur. J.* **2018**, 24, 1720.
- 112.** *Utilising Sodium-Mediated Ferration for Regioselective Functionalisation of Fluoroarenes via C–H and C–F Bond Activations*. L. C. H. Maddock, T. Nixon, A. R. Kennedy, M. R. Probet, W. Clegg, E. Hevia, *Angew. Chem. Int. Ed.* **2018**, 57, 187.
- 111.** *Ligand-induced reactivity of β -diketiminato magnesium complexes for regioselective functionalization of fluoroarenes via C–H or C–F bond activations*. L. Davin, R. McLellan, A. R. Kennedy, E. Hevia, *Chem. Commun.*, **2017**, 53, 11650.
- 110.** *LiTMP Trans-Metal-Trapping of Fluorinated Aromatic Molecules: A Comparative Study of Aluminum and Gallium Carbanion Traps*. R. McLellan, M. Uzelac, A. R. Kennedy, E. Hevia, R. E. Mulvey, *Angew. Chem. Int. Ed.*, **2017**, 56, 9566
- 109.** *Trans-metal-trapping meets Frustrated-Lewis-Pair Chemistry: Ga(CH₂SiMe₃)₃ Induced C-H Functionalizations*. M. Uzelac, A. R. Kennedy, E. Hevia, *Inorg. Chem.* **2017**, 56, 8615 (Forum Article).

- 108.** *C-N bond activation and ring opening of a saturated N heterocyclic carbene via lateral alkali-metal-mediated metallation (AMMM).* A. Hernán-Gómez, A. R. Kennedy, E. Hevia, *Angew. Chem. Int. Ed.*, **2017**, *56*, 6632.
- 107.** *Synthetic, Structural and Magnetic Implications of Introducing 2,2'-Dipyridylamide to Sodium-Ferrate Complexes.* L. C. H. Maddock, I. Borilovic, J. McIntyre, A. R. Kennedy, G. Aromí, E. Hevia, *Dalton Trans.* **2017**, *46*, 6683.
- 106.** *Regioselective magnesiation of N-heterocyclic molecules: securing insecure cyclic anions by a β -diketiminato-magnesium clamp.* L. Davin, R. McLellan, A. Hernán-Gómez, W. Clegg, A. R. Kennedy, M. Mertens, I. Stepek, E. Hevia, *Chem. Commun.*, **2017**, *53*, 3653
- 105.** *Exploiting Deep Eutectic Solvents and Organolithium Reagent Partnerships: Chemoselective Ultrafast Addition to Imines and Quinolines Under Aerobic Ambient Temperature Conditions.* C. Vidal, J. García-Álvarez, A. Hernán-Gómez, A. R. Kennedy, E. Hevia, *Angew. Chem. Int. Ed.* **2016**, *55*, 16145.
- 104.** *Structural and Mechanistic Insights into s-Block Bimetallic Catalysis: Sodium Magnesiato-Catalyzed Guanylation of Amines.* M. De Tullio, A. Hernán-Gómez, Z. Livingstone, W. Clegg, A. R. Kennedy, R. W. Harrington, A. Antiñolo, A. Martínez, F. Carrillo-Hermosilla, E. Hevia, *Chem. Eur. J.* **2016**, *22*, 17646.
- 103.** *Heavier alkali-metal gallates as platforms for accessing functionalized abnormal NHC carbene-gallium complexes.* M. Uzelac, A. R. Kennedy, A. Hernán-Gómez, M. A. Fuentes, E. Hevia, *Z. Anorg. Allg. Chem.*, **2016**, *642*, 1241 (Invited contribution to special issue on N-Heterocyclic Carbenes).
- 102.** *Understanding the subtleties of frustrated Lewis pair activation of carbonyl compounds by N-Heterocyclic carbene/alkyl gallium pairings.* M. Uzelac, D. R. Armstrong, A. R. Kennedy, E. Hevia, *Chem. Eur. J.* **2016**, *22*, 15826
- 101.** *Synthesis, structure and solution studies on mixed aryl/alkyl lithium zincates.* A. J. Roberts, A. R. Kennedy, R. McLellan, S. D. Robertson, E. Hevia, *Eur. J. Inorg. Chem.*, **2016**, 4752.
- 100.** *Transforming LiTMP Lithiation of Challenging Diazines through Gallium Alkyl Trans-Metal-Trapping.* M. Uzelac, A. R. Kennedy, E. Hevia, R. E. Mulvey, *Angew. Chem. Int. Ed.* **2016**, *55*, 13147.
- 99.** *Structural and Magnetic Diversity in Alkali-Metal Manganate Chemistry: Evaluating Donor and Alkali-Metal Effects in Co-complexation Processes.* M. Uzelac, I. Borilovic, M. Amores, T. Cadenbach, A. R. Kennedy, G. Aromí, E. Hevia, *Chem. Eur. J.* **2016**, *22*, 4843 (VIP Paper).
- 98.** *Assessing the reactivity of sodium alkyl-magnesiates towards quinoxaline: single electron transfer (SET) vs. nucleophilic alkylation processes.* Z. Livingstone, A. Hernán-Gómez, S. E. Baillie, D. R. Armstrong, L. M. Carrella, W. Clegg, R. W. Harrington, A. R. Kennedy, E. Rentschler, E. Hevia, *Dalton Trans.*, **2016**, *45*, 6175.
- 97.** *Alkali-Metal-Mediated Magnesiations of an N-Heterocyclic Carbene: Normal, Abnormal, and "Paranormal" Reactivity in a Single Tritopic Molecule.* A. Martínez-Martínez, M. A. Fuentes, A. Hernán-Gómez, E. Hevia, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, *Angew. Chem. Int. Ed.* **2015**, *54*, 14075.
- 96.** *Reactivity of Polar Organometallic Compounds in Unconventional Reaction Media: Challenges and Opportunities.* J. García-Alvarez, E. Hevia, V. Capriati, *Eur. J. Org. Chem.* **2015**, 6779 (Microreview).
- 95.** *Accessing Sodium Ferrate Complexes Containing Neutral and Anionic N-Heterocyclic Carbene Ligands: Structural, Synthetic, and Magnetic Insights.* L. C. H. Maddock, T. Cadenbach, A. R. Kennedy, I. Borilovic, G. Aromí, E. Hevia, *Inorg. Chem.* **2015**, *54*, 9201.
- 94.** *Rational synthesis of normal, abnormal and anionic NHC-gallium alkyl complexes: structural, stability and isomerization insights.* M. Uzelac, A. Hernán-Gómez, D. R. Armstrong, A. R. Kennedy, E. Hevia, *Chem. Sci.* **2015**, *6*, 5719.

- 93.** *Zincate-Mediated Arylation Reactions of Acridine: Pre- and Postarylation Structural Insights.* A. Hernan-Gomez, E. Herd, M. Uzelac, T. Cadenbach, A. R. Kennedy, I. Borilovic, G. Aromi, E. Hevia, *Organometallics*, **2015**, *34*, 2614.
- 92.** *Structurally Defined Zincated and Aluminated Complexes of Ferrocene Made by Alkali-Metal Synergistic Syntheses.* W. Clegg, E. Crosbie, S. H. Dale-Black, E. Hevia, G. W. Honeyman, A. R. Kennedy, R. E. Mulvey, D. L. Ramsay, S. D. Robertson, *Organometallics*, **2015**, *34*, 2580.
- 91.** *Two alternative approaches to access mixed hydride-amido zinc complexes: synthetic, structural and solution implications.* A. J. Roberts, W. Clegg, A. R. Kennedy, M. Probert, S. D. Robertson, E. Hevia, *Dalton Trans.* **2015**, *44*, 8169.
- 90.** *Introducing Deep Eutectic Solvents to Polar Organometallic Chemistry: Chemoselective Addition of Organolithium and Grignard Reagents to Ketones in Air.* C. Vidal, J. Garcia-Alvarez, A. Hernan-Gomez, A. R. Kennedy, E. Hevia, *Angew. Chem. Int. Ed.* **2014**, *53*, 5969.
- 89.** *Potassium-alkyl magnesiates: synthesis, structures and Mg-H exchange applications of aromatic and heterocyclic substrates.* S. E. Baillie, T. Bluemke, W. Clegg, A. R. Kenedy, J. Klett, L. Russo, M. de Tullio, E. Hevia, *Chem. Commun.* **2014**, *50*, 12859.
- 88.** *New supramolecular assemblies in heterobimetallic chemistry: synthesis of a homologous series of unsolvated alkali-metal zincates.* D. R. Armstrong, H. S. Emerson, A. Hernan-Gomez, A. R. Kennedy, E. Hevia, *Dalton Trans.* **2014**, *43*, 14229.
- 87.** *Structural and reactivity insights in Mg Zn hybrid chemistry: Zn-I exchange and Pd-catalysed cross-coupling applications of aromatic substrates.* T. D. Bluemke, W. Clegg, P. Garcia-Alvarez, K. Koszinowski, M. D. Call, L. Russo, E. Hevia, *Chem. Sci.* **2014**, *5*, 3552.
- 86.** *TMP (2,2,6,6-tetramethylpiperidide)-aluminate bases: lithium-mediated aluminatation or lithiation alkylaluminium-trapping reagents?* D. R. Armstrong, E. Crosbie, E. Hevia, R. E. Mulvey, D. L. Ramsay, S. D. Robertson, *Chem. Sci.* **2014**, *5*, 3031.
- 85.** *Organozinc Pivalate Reagents: Segregation, Solubility, Stabilization, and Structural Insights.* A. Hernan-Gomez, E. Herd, E. Hevia, A. R. Kennedy, P. Knochel, K. Koszinowski, S.M. Manolikakes, R. E. Mulvey, C. Schnegelsberg, *Angew. Chem. Int. Ed.* **2014**, *53*, 2706.
- 84.** *Probing the metallating ability of a polybasic sodium alkylmagnesiates supported by a bulky bis(amido) ligand: deprotomagnesiates reactions of nitrogen-based aromatic substrates.* D. R. Armstrong, W. Clegg, A. Hernan-Gomez, A. R. Kennedy, Z. Livingstone, S. D. Robertson, L. Russo, E. Hevia, *Dalton Trans.* **2014**, *43*, 4361 (Invited contribution to themed issue *New Talent: Europe*).
- 83.** *Donor-Activated Lithiation and Sodiation of Trifluoromethylbenzene: Structural, Spectroscopic, and Theoretical Insights.* J. A. Garden, D. R. Armstrong, W. Clegg, J. Garcia-Alvarez, E. Hevia, A. R. Kennedy, R. E. Mulvey, S. D. Robertson, L. Russo, *Organometallics*, **2013**, *32*, 5481.
- 82.** *Alkali-metal-mediated zincation (AMMZn) meets N-heterocyclic carbene(NHC) chemistry: Zn-H exchange reactions and structural authentication of a dinuclear Au(I) complex with a NHC anion.* D. R. Armstrong, S. E. Baillie, V. L. Blair, N. G. Chabloz, J. Diez, J. Garcia-Alvarez, A. R. Kennedy, S. D. Robertson, E. Hevia, *Chem. Sci.* **2013**, *4*, 4259.
- 81.** *Concealed Cyclotrimeric Polymorph of Lithium 2,2,6,6-Tetramethylpiperidide Unconcealed: X-Ray Crystallographic and NMR Spectroscopic Studies.* E. Hevia, A. R. Kennedy, R. E. Mulvey, D. L. Ramsay, S. D. Robertson, *Chem. Eur. J.* **2013**, *19*, 14069.

- 80.** *Developing Catalytic Applications of Cooperative Bimetallics: Competitive Hydroamination Trimerization Reactions of Isocyanates Catalysed by Sodium Magnesiates.* A. Hernán-Gómez, T. D. Bradley, A. R. Kennedy, Z. Livingstone, S. D. Robertson, E. Hevia, *Chem. Commun.* **2013**, 49, 8659.
- 79.** *Isomeric and chemical consequences of the direct magnesiation of 1,3-benzoxazoles using β -diketiminato-stabilized magnesium bases.* S. E. Baillie, V. L. Blair, T. Bradley, W. Clegg, J. Cowan, R. Harrington, A. Hernan-Gomez, A. R. Kennedy, Z. Livingstone, *E. Hevia*, *Chem. Sci.* **2013**, 4, 1895.
- 78.** *Co-complexation, Syntheses, Structural Characterization, and DFT studies of a novel series of Polymeric Alkali-Metal Tetraorganogallates.* D. R. Armstrong, E. Brammer, T. Cadenbach, *E. Hevia*, A. R. Kennedy, *Organometallics*, **2013**, 32,480.
- 77.** *Synthesis, structural elucidation, and diffusion-ordered NMR studies of homoleptic alkyllithium magnesiates: donor-controlled structural variations in mixed-metal chemistry.* S. D. Baillie, W. Clegg, P. Garcia-Alvarez, E. Hevia, A. R. Kennedy, J. Klett, L. Russo, *Organometallics*, **2012**, 31,5131.
- 76.** *Accessing low denticity coordination modes of a high denticity tripodal ligand to complete its coordinative repertoire.* T. Cadenbach, *E. Hevia*, A. R. Kenendy, R. E. Mulvey, J. A. Pickrell, S. D. Robertson, *Dalton Trans.*, **2012**, 41,10141.
- 75.** *New Lithium-Zincate Approaches for the Selective Functionalisation of Pyrazine: Direct Dideprotozincation vs Nucleophilic Alkylation.* S. E. Baillie, V. L. Blair, D. C. Blakemore, D. Hay, *E. Hevia*, A. R. Kenendy, D. C. Pryde, *Chem. Commun.* **2012**, 48, 1985.
- 74.** *Assessing the reactivity of sodium zincate [(TMEDA)Na(TMP)Zn^tBu₂] towards benzoylferrocene: deprotonative metalation vs alkylation reactions.* E. Hevia, A. R. Kennedy, M. D. McCall, *Dalton Trans* **2012**, 41, 98.
- 73.** *Meta-metallation of N,N-dimethylaniline: Contrasting direct sodium-mediated-zincation with indirect sodiation-dialkylzinc co-complexation.* D. R. Armstrong, L. Balloch, *E. Hevia*, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, S. D. Robertson, *Belstein J. Org. Chem.* **2011**, 7, 1234.
- 72.** *Magnesium-Mediated Benzothiazole Activation: a Room Temperature Cascade of C-H Deprotonation, C-C Coupling, Ring-Opening and Nucleophilic Addition Reactions.* V. L. Blair, W. Clegg, A. R. Kennedy, Z. Livingstone, L. Russo, *E. Hevia*, *Angew. Chem. Int. Ed.* **2011**, 50, 9857.
- 71.** *A record-breaking Magnesium-Hydride Molecular Cluster: Implications for hydrogen storage.* *E. Hevia*, R. E. Mulvey, *Angew. Chem. Int. Ed.* **2011**, 50, 9242 (Highlight).
- 70.** *Split Personality of Lithium Chloride: Recent Salt Effects in Organometallic Recipes.* *E. Hevia*, R. E. Mulvey, *Angew. Chem. Int. Ed.* **2011**, 50, 6448 (Highlight).
- 69.** *Alkali-metal mediated zincation of N-heterocyclic substrates using the lithium zincate complex, (THF)Li(TMP)Zn(tBu)₂ and applications in in situ cross-coupling reactions.* V. L. Blair, D. C. Blakemore, D. Hay, *E. Hevia*, D. C. Pryde, *Tet. Lett.* **2011**, 52, 4590.
- 68.** *A New Polymeric alkyl/alkoxide magnesium-sodium inverse crown complex.* S. E. Baillie, V. L. Blair, *E. Hevia*, A. R. Kennedy, *Act Cryst. Sect C*, **2011**, C67, m249.
- 67.** *Expanding Mg-Zn hybrid chemistry: Inorganic salt effects in addition reactions of organozinc reagents to trifluoromethyl acetophenone and implications for a synergistic lithium-magnesium-zinc activation.* D. R. Armstrong, W. Clegg, P. García-Alvarez, M. D. McCall, A. R. Kennedy, L. Russo, *E. Hevia* *Chem. Eur. J.* **2011** 17, 833.
- 66.** *Shedding New Light on ZnCl₂-Mediated Addition Reactions of Grignard Reagents to Ketones: Structural Authentication of Key Intermediates and Diffusion-Ordered NMR Studies.* D. R. Armstrong, W. Clegg, P. García-Alvarez, *E. Hevia*, M. D. McCall, L. Nuttall, A. R. Kennedy, L. Russo, *Chem. Eur. J.* **2011** 17, 4470.

65. *Synthesis and Characterization of an Infinite Sheet of Metal-Alkyl Bonds: Unfolding the Elusive Structure of an Unsolvated Alkali-Metal Trisalkylmagnesiato.* S. E. Baillie, W. Clegg, P. Garcia-Alvarez, E. Hevia, A. R. Kennedy, J. Klett, L. Russo, *Chem. Commun.*, **2011**, 47, 388.
64. *Structural Basis for Regioisomerization in the Alkali-Metal-Mediated Zincation (AMMZn) of Trifluoromethyl Benzene by Isolation of Kinetic and Thermodynamic Intermediates.* D. R. Armstrong, V. L. Blair, W. Clegg, S. H. Dale, J. Garcia-Alvarez, E. Hevia, G. W. Honeyman, R. E. Mulvey, L. Russo, *J. Am. Chem. Soc.* **2010**, 132, 9480.
63. *Exposing the Hidden Complexity of Stoichiometric and Catalytic Metathesis Reactions by Elucidation of Mg-Zn Hybrids.* J. Z. Chua, P. Garcia-Alvarez, E. Hevia, A. R. Kennedy, M. D. McCall, *Proc. Natl. Acad. Sci. USA*, **2010**, 107, 5294.
62. *New Insights into Addition Reactions of Dialkylzinc Reagents to Trifluoromethyl Ketones: Structural Authentication of a β -hydride Elimination Product Containing a Tetranuclear Zinc Chain.* E. Hevia, A. R. Kennedy, J. Klett, Z. Livingstone, M. D. McCall, *Dalton Trans.*, **2010**, 39, 520.
61. *Closer Insight into the Reactivity of TMP-dialkyl Zincates in Directed ortho-Zincation of Anisole: Experimental Evidence of Amido Basicity and Structural Elucidation of Key Reaction Intermediates.* W. Clegg, B. Conway, E. Hevia, M. D. McCall, L. Russo, R. E. Mulvey, *J. Am. Chem. Soc.* **2009**, 131, 2375.
60. *Donor-dictated Interlocking Co-complexation Reactions of LiNHDipp with Dimethylzinc: Synthesis and Structures of New Methyl(amido)zincates.* W. Clegg, D. V. Graham, E. Herd, E. Hevia, A. R. Kennedy, M. D. McCall, L. Russo, *Inorg. Chem.* **2009**, 48, 5320.
59. *Direct lateral Metallation using Alkali-Metal-Mediated Zincation (AMMZn): SiC-H vs Si-O Bond Cleavage.* E. Hevia, A. R. Kennedy, J. Klett, M. D. McCall, *Chem. Commun.* **2009**, 3240.
58. *Synthetic and Structural Insights into the Zincation of Toluene: Direct Synergic Ring Metalation vs Indirect Non-synergic Lateral Metalation.* D. R. Armstrong, J. Garcia-Alvarez, D. V. Graham, G. W. Honeyman, E. Hevia, A. R. Kennedy, R. E. Mulvey, *Chem. Eur. J.*, **2009**, 15, 3800.
57. *Contacted ion-pair lithium alkylamidoaluminates: intramolecular aluminatation (Al-H exchange) traps for TMEDA and PMDETA.* B. Conway, J. Garcia-Alvarez, E. Hevia, A. R. Kennedy, R. E. Mulvey, S. D. Robertson, *Organometallics*, **2009**, 28, 6462.
56. *Synergic Synthesis of Benzannulated Zincabicyclic Complexes, α -Zincated N Ylides, through Sodium TMEDA-Mediated Zincation of a Haloarene.* D. R. Armstrong, L. Balloch, W. Clegg, S. H. Dale, P. Garcia-Alvarez, E. Hevia, L. M. Hogg, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, *Angew. Chem. Int. Ed.* **2009**, 48, 8675.
55. *Structurally Defined Potassium-Mediated Zincation of Pyridine and 4-R-Substituted Pyridines (R= Et, iPr, tBu, Ph and Me₂N) by Using Dialkyl-TMP-Zincate Bases.* W. Clegg, B. Conway, D. V. Graham, E. Hevia, A. R. Kennedy, R. E. Mulvey, L. Russo, D. S. Wright, *Chem. Eur. J.*, **2009**, 15, 7074.
54. *Synthesis and Structural Elucidation of Alkyl, Amido and Mixed Alkyl-Amido "Highly-Coordinated" Zincates.* D. R. Armstrong, C. Dougan, D. V. Graham, E. Hevia, A. R. Kennedy, *Organometallics*, **2008**, 27, 6063.
53. *Metalation of 2, 4, 6-Trimethylacetophenone using Organozinc Reagents.* D. R. Armstrong, A. M. Drummond, L. Balloch, D. V. Graham, E. Hevia, A. R. Kennedy, *Organometallics*, **2008**, 27, 5860-5866.
52. *Synthesis and Structural Elucidation of Solvent-Free and Solvated Lithium Dimethyl(HMDS) zincates.* D. R. Armstrong, E. Herd, D. V. Graham, E. Hevia, A. R. Kennedy, W. Clegg, L. Russo, *Dalton Trans.* **2008**, 1323.

51. *Transamination Chemistry of Sodium TMP-zincate: Synthesis and Crystal Structure of a Chiral Amidozincate*. D. R. Armstrong, W. Clegg, S. H. Dale, J. García-Álvarez, R. W. Harrington, E. Hevia, G. W. Honeyman, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, *Chem. Commun.* **2008**, 187.
50. *Unmasking Representative Structures of TMP-Active Hauser and Turbo Hauser Bases*. P. García-Álvarez, D. V. Graham, E. Hevia, A. R. Kennedy, J. Klett, R. E. Mulvey, C. T. O'Hara, S. Weatherstone, *Angew. Chem. Int. Ed.* **2008**, 47, 8079.
49. *Synthesis, Structural Authentication, and Structurally Defined Metalation Reactions of Lithium and Sodium DA-Zincate Bases (DA= diisopropylamide) with Phenylacetylene*. W. Clegg, J. García-Álvarez, P. García-Álvarez, D. V. Graham, R. W. Harrington, E. Hevia, A. R. Kennedy, R. E. Mulvey, L. Russo, *Organometallics*. **2008**, 27, 2654.
48. *Structurally-defined Potassium-Mediated Regioselective Zincation of Amino-and Alkoxy Substituted Pyridines*. B. Conway, D. V. Graham, E. Hevia, A. R. Kennedy, J. Klett, R. E. Mulvey, *Chem. Commun.* **2008**, 2638.
47. *Synthesis and Characterisation of New Bimetallic Alkali Metal-Magnesium Mixed Diisopropylamide-Acetylides: Structural Variations in Bimetallic Lithium- and Sodium-Heteroleptic Magnesiates*. J. García-Álvarez, D. V. Graham, E. Hevia, A. R. Kennedy, R. E. Mulvey, *Dalton Trans.* **2008**, 1481.
46. *Alkali-Metal-Mediated Manganation(II) of Functionalized Arenes and Applications of Ortho-Manganated Products in Pd-Catalyzed Cross-Coupling Reactions with Iodobenzene*. V. L. Blair, W. Clegg, B. Conway, E. Hevia, A. Kennedy, J. Klett, R. E. Mulvey, L. Russo, *Chem. Eur. J.* **2008**, 14, 65.
45. *Structurally-Defined Reactions of Sodium TMP-Zincate with Nitrile Compounds: Synthesis of a Salt-like Sodium Sodiumdizincate and Other Unexpected Ion Pair Products*. W. Clegg, S. H. Dale, E. Hevia, L. M. Hogg, G. W. Honeyman, R. E. Mulvey, C. T. O'Hara, L. Russo, *Angew. Chem. Int. Ed.* **2008**, 47, 731.
44. *Structurally-Defined Direct C-Magnesium and C-Zincation of N-Heterocyclic Aromatic Compounds using Alkali-Metal-Mediated Metallation*. B. Conway, E. Hevia, A. R. Kennedy, R. E. Mulvey, *Chem. Commun.* **2007**, 2864.
43. *Isolation and structural elucidation of a key aluminoaromatic intermediate and evidence for dismutation phenomena in TMP-alumination chemistry*. B. Conway, E. Hevia, J. García-Álvarez, D. V. Graham, A. R. Kennedy, R. E. Mulvey, *Chem. Commun.* **2007**, 5241.
42. *Lewis base stabilized lithium TMP – aluminates: an unexpected fragmentation and capture reaction involving cyclic ether 1,4-dioxane*. J. Garcia-Alvarez, E. Hevia, A. R. Kennedy, J. Klett, R. E. Mulvey, *Chem. Commun.* **2007**, 2402.
41. *Synthesis of Mixed Alkali Metal-Zinc Enolate Complexes Derived from 2, 4, 6-Trimethylacetophenone: New Inverse Crown Structures*. S. H. Baillie, E. Hevia, A. R. Kennedy, R. E. Mulvey, *Organometallics*, **2007**, 26, 204.
40. *Structural Variations in Bimetallic Sodium-Magnesium and Sodium-Zinc Ketimides, and a Sodium-Zinc Alkide-Alkoxide-Amide: Connections to Ring-Stacking, Ring-Laddering, and Inverse Crown Concepts*. W. Clegg, S. H. Dale, D. V. Graham, R. W. Harrington, E. Hevia, L. M. Hogg, A. R. Kennedy, R. E. Mulvey, *Chem. Commun.* **2007**, 1641.
39. *Dizincation and Dimagnesiumation of Benzene using Alkali-Metal-Mediated Metallation*. D. R. Armstrong, W. Clegg, S. H. Dale, D. V. Graham, E. Hevia, L. M. Hogg, G. W. Honeyman, A. R. Kennedy, R. E. Mulvey, *Chem. Commun.* **2007**, 598.
38. *Lithium Dimethyl-amidozinc Complexes: Contrasting Zincate (Amido = TMP) and Inverse Zincate (Amido = HMDS) Structures on Addition of TMEDA*. D. V. Graham, E. Hevia, A.R. Kennedy, R. E. Mulvey, *Organometallics*, **2006**, 25, 3297.

37. *Synthesis and Reactivity of New(Methoxy)methyl Complexes of Manganese(I) and Rhenium(I)*. E. Hevia, D. Miguel, J. Pérez, V. Riera, *Organometallics*, **2006**, 25, 4909.
36. *Synergic Para-Directed-Monometalation of Bis(toluene)chromium by using Alkali-Metal-Mediated Magnesiatio*n. P. C. Andrikopoulos, D. R. Armstrong, E. Hevia, A. R. Kennedy, R. E. Mulvey, *Organometallics*, **2006**, 25, 2415.
35. *Synthesis and Characterization of New Mixed-Metal Sodium-Magnesium Enolates Derived from 2, 4, 6-Trimethylacetophenone*. E. Hevia, K. W. Henderson, A. R. Kennedy, R. E. Mulvey, *Organometallics*, **2006**, 25, 1778.
34. *Electronic Structure and Excited States of Rhenium(I) Amido and Phosphido Carbonyl-Bipyridine Complexes Studied by Picosecond Time-Resolved IR Spectroscopy and DFT Calculations*. A. Grabrielsson, M. Busby, P. Matousek, M. I. Towrie, E. Hevia, L. Cuesta, J. Perez, S. Zalis, A. Vlcek, Jr. *Inorg. Chem.* **2006**, 45, 9789.
33. *Alkali-Metal-Mediated Zincation of Polycyclic Aromatic Hydrocarbons: Synthesis and Structures of Monozincated and Dizincated Naphthalenes*. W. Clegg, S. H. Dale, E. Hevia, L. M. Hogg, G. W. Honeyman, R. E. Mulvey, C. T. O'Hara, *Angew. Chem. Int. Ed.* **2006**, 45, 6548.
32. *Alkali-Metal-Mediated Zincation of Anisole: Synthesis and Structures of Three Instructive Ortho-Zincated Complexes*. W. Clegg, S. H. Dale, E. Hevia, G. W. Honeyman, R. E. Mulvey, *J. Am. Chem. Soc.* **2006**, 128, 7434.
31. *Directed Meta-Metalation Using Alkali-Metal-Mediated Zincation*. D. R. Armstrong, W. Clegg, S. H. Dale, E. Hevia, L. M. Hogg, G. W. Honeyman, R. E. Mulvey, *Angew. Chem. Int. Ed.* **2006**, 45, 3775.
30. *Reactivity of Molybdenum and Rhenium Hydroxo Complexes toward Organic Electrophiles: Reactions that Afford Carboxylato Products*. L. Cuesta, E. Hevia, D. Morales, J. Pérez, L. Riera, D. Miguel, *Organometallics*, **2006**, 25, 1717.
29. *Pre-Metalation Insights into the Use of Alkali-Metal-Mediated Zincation for Directed ortho-Metalation of a Tertiary Aromatic Amide*. W. Clegg, S. H. Dale, E. Hevia, G. W. Honeyman, R. E. Mulvey, *Angew. Chem. Int. Ed.* **2006**, 45, 2370.
28. *Post-Metalation Insights into the Use of Alkali-Metal-Mediated Zincation for Directed ortho-Metalation of a Tertiary Aromatic Amide*. W. Clegg, S. H. Dale, R. W. Harrington, E. Hevia, G. W. Honeyman, R. E. Mulvey, *Angew. Chem. Int. Ed.* **2006**, 45, 2374.
27. *Building an Extended Inverse Crown Motif via Alkali-Metal-Mediated α -Magnesiation of Furan*. D. V. Graham, E. Hevia, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, Christine Talmard, *Chem. Commun.* **2006**, 417.
26. *Trapping, Stabilization, and Characterization of an Enolate Anion of a 1, 6 – Adduct of Benzophenone Chelated by a Sodium Alkylamidozincate Cation*. E. Hevia, G. W. Honeyman, A. R. Kennedy, R. E. Mulvey, *J. Am. Chem. Soc.* **2005**, 127, 13106.
25. *Alkali-Metal-Mediated Zincation of Ferrocene: Synthesis, Structure, and Reactivity of a New Lithium TMP-Zincate Reagent*. H. R. L. Barley, William Clegg, S. H. Dale, E. Hevia, G. W. Honeyman, A. R. Kennedy, R. E. Mulvey, *Angew. Chem. Int. Ed.*, **2005**, 44, 6018.
24. *Stoichiometrically-controlled reactivity and supramolecular storage of butylmagnesiato anions*. P. C. Andrikopoulos, D. R. Armstrong, E. Hevia, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, *Chem. Commun.* **2005**, 1131.

23. *Sodium Dialkyl-amidozincates, Alkyl or Amido Bases? An Experimental and Theoretical Case Study.* P. C. Andrikopoulos, D. R. Armstrong, H. R. L. Barley, W. Clegg, S. H. Dale, E. Hevia, G. W. Honeyman, A. R. Kennedy, R. E. Mulvey, *J. Am. Chem. Soc.* **2005**, *127*, 6184.
22. *Selective Meta-Deprotonation of Toluene Using Alkali Metal-Mediated Magnesiatio*n. P. C. Andrikopoulos, D. R. Armstrong, D. V. Graham, E. Hevia, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, C. Talmard, *Angew. Chem. Int. Ed.* **2005**, *44*, 3459.
21. *Synthesis and characterization of a series of alkylmagnesium amide and related oxygen-contaminated alkoxy compounds.* B. Conway, E. Hevia, A. R. Kennedy, R. E. Mulvey, S. Weatherstone, *Dalton Trans.* **2005**, 1532.
20. *Activation of ancillary ligands in the reactions of DMAD with phosphido and alkylidenamido rhenium complexes;* L. Cuesta, E. Hevia, D. Morales, J. Pérez, V. Riera, M. Seitz, D. Miguel, *Organometallics* **2005**, *24*, 1772.
19. *Activation of a 1,10-phenanthroline ligand on a rhenium tricarbonyl complex.* L. Cuesta, E. Hevia, D. Morales, J. Pérez, V. Riera, E. Rodríguez, D. Miguel, *Chem. Commun.* **2005**, 116.
18. *Synergic monodeprotonation of bis(benzene)chromium using mixed alkali metal-magnesium amide bases and structural characterization of the heterotrimetallic products;* E. Hevia, G. W. Honeyman, A. R. Kennedy, R. E. Mulvey, D. C. Sherrington, *Angew. Chem. Int. Ed.* **2005**, *44*, 68.
17. *Isolation and characterization of the heterometallic sodium-magnesium mixed monoalkyl-bisamido complex [Na(μ -Bu)(μ -TMP)Mg(TMP).(TMEDA)]: chelate-trapping of a surprising intermediate in the formation of inverse crowns.* E. Hevia, D. J. Gallagher, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, C. Talmard, *Chem. Commun.* **2004**, 2422.
16. *A homologous series of regioselectively tetradeprotonated group 8 metallocenes: new inverse crown ring compounds synthesized via mixed sodium-magnesium tris(diisopropylamide) synergic base.* P. C. Andrikopoulos, D. R. Armstrong, W. Clegg, C. J. Gilfillan, E. Hevia, A. R. Kennedy, R. E. Mulvey, C. T. O'Hara, J. A. Parkinson, D. M. Tooke, *J. Am. Chem. Soc.* **2004**, *126*, 11612.
15. *Synthesis and crystal structure of [$\{n\text{BuMg}(\mu\text{-TMP})_2\}$] and of a homometallic inverse crown in tetranuclear [$\{n\text{BuMg}_2[\mu\text{-N(H)Dipp}]_2[\mu_3\text{-OnBu}]\}_2$].* E. Hevia, A. R. Kennedy, R. E. Mulvey, S. Weatherstone, *Angew. Chem. Chem. Int. Ed.* **2004**, *43*, 1709.
14. *Reactivity of Molybdenum and Rhenium hydroxo-carbonyl complexes toward organic electrophiles.* L. Cuesta, D. C. Gerbino, E. Hevia, D. Morales, M. E. Navarro Clemente, J. Pérez, L. Riera, V. Riera, D. Miguel, I. Del Rio, S. Garcia-Granda, *Chem. Eur. J.* **2004**, *10*, 1765.
13. *Solvent-free and TMEDA-solvated mixed alkali metal-magnesium tris-diisopropylamides.* E. Hevia, F. R. Kenley, A. R. Kennedy, R. E. Mulvey, R. B. Rowlings, *Eur. J. Inorg. Chem.* **2003**, 3347.
12. *Synthesis of β -lactams from a N-rhenaimine: effect of the transition metal on the energetic profile of the Staudinger reaction.* E. Hevia, J. Pérez, V. Riera, D. Miguel, M. I. Menéndez, T. L. Sordo, S. García-Granda, *J. Am. Chem. Soc.* **2003**, *125*, 3706.
11. *Mono and bimetallic cyanocomplexes with $\{Mo(\eta^3\text{-allyl})(CO)_2(N\text{-}N)\}$ fragments.* J. Pérez, E. Hevia, L. Riera, V. Riera, S. García-Granda, E. García-Rodríguez, D. Miguel, *Eur. J. Inorg. Chem.* **2003**, 1113.
10. *A new reactivity pattern of low-valent transition-metal hydroxo complexes: straightforward synthesis of hydrosulfido complexes via reaction with carbon disulfide.* D. Gerbino, E. Hevia, D. Morales, M. E. Navarro Clemente, J. Pérez, L. Riera, V. Riera, D. Miguel, *Chem. Commun.* **2003**, 328.
9. *Reactivity of the amido complex [Re(NHpTol)(CO)₃(bipy)] toward neutral organic electrophiles.* E. Hevia, J. Pérez, V. Riera, D. Miguel, *Organometallics* **2003**, *22*, 257.

8. *Manganese (I) and rhenium (I) tricarbonyl (alkylthio)methyl and alkylidenesulfonium complexes.* E. Hevia, J. Pérez, V. Riera, D. Miguel, *Organometallics* **2002**, 21, 5312.
7. *Insertion and cycloaddition reactivity of a transition-metal N-metalloimine.* E. Hevia, J. Pérez, V. Riera, D. Miguel, *Angew. Chem. Int. Ed.* **2002**, 41, 3858.
6. *Insertion of Unsaturated Organic Electrophiles into Molybdenum-Alkoxide and Rhenium-Alkoxide Bonds of Neutral, Stable Carbonyl Complexes.* E. Hevia, J. Pérez, L. Riera, V. Riera, I. Del Río, S. García-Granda, D. Miguel, *Chem. Eur. J.* **2002**, 8, 4510.
5. *Different sites of insertion in the reaction of isocyanates with [Re(N(R)Ar)(CO)₃(bipy)] (R = H or Me): N-H vs. Re-N.* E. Hevia, J. Pérez, V. Riera, D. Miguel, *Chem. Commun.* **2002**, 1817.
4. *New synthetic routes to cationic rhenium tricarbonyl bipyridine complexes with labile ligands.* E. Hevia, J. Pérez, V. Riera, D. Miguel, S. Kassel, A. Rheingold, *Inorg. Chem.* **2002**, 41, 4673.
3. *New octahedral rhenium (I) tricarbonyl amido complexes.* E. Hevia, J. Pérez, V. Riera, D. Miguel, *Organometallics* **2002**, 21, 1966.
2. *Reactive Alkoxide Complexes of Groups 6 and 7 Metals.* E. Hevia, J. Pérez, L. Riera, V. Riera, D. Miguel, *Organometallics* **2002**, 21, 1750.
1. *Synthesis and structure of a tris imido phosphonate anion; the missing link in imido analogues of phosphorus oxoanions.* L. T. Burke, E. Hevia-Freire, R. Holland, J. C. Jeffery, A. P. Leedham, C. A. Russell, A. Steiner, A. Zagorski. *Chem. Commun.* **2000**, 1769.