

Leslie John Ray Foster

PROFESSIONAL QUALIFICATIONS

2016	FRSC	Elected Fellow of 'The Royal Society of Chemistry'.
2009	Cert.	Level 1 Laser Safety, Australian Defence Force Academy, Sydney.
2007	FRSB	Elected Fellow of 'The Royal Society for Biology'.
1993	PhD	Biomaterials Research Unit, Dept. of Chemical Engineering & Applied Chemistry, Aston University, Birmingham, U.K.
1987	BSc(Hons)	Department of Biology & Biochemistry, University of Wales, University College of Swansea, Wales, U.K.

AWARDS & FELLOWSHIPS

2016	Winner 'The Fulbright Alumni Initiative Grant'. – <i>Collaboration with UPMC</i>
2013	'Inventor of the Year' Finalist – Early Stage Commercialisation Category, New South Innovations Ltd – <i>electrospinning of novel biomaterials for nerve repair</i>
2012	Winner 'The Fulbright Alumni Initiative Grant'. – <i>Collaboration with UPMC</i>
2010	'Inventor of the Year' Finalist - Biomedicine Category, New South Innovations Ltd – <i>laser activated adhesive for sutureless surgery</i>
2010	'Inventor of the Year' Finalist – Early Stage Commercialisation Category, New South Innovations Ltd – <i>proteomic based biocompatibility applications</i>
2009-2010	Fulbright Senior Scholar – <i>surgical adhesive with ECM for tissue engineering</i>
2008	National 'Carrick Citation for Teaching Excellence' nomination.
2005-2007	Marie Curie Incoming International Fellow – <i>biodegradation and SANS of biomaterials</i>
2004	Visiting Fellow, Aston University – <i>biomaterials for wound scaffolding</i>
2002	Innovative Teaching & Educational Technology Fellowship – <i>development and implementation of novel teaching practices</i>
2000	Sir Anthony Mason Fellowship – <i>research excellence in Asia-Pacific region</i>
1993-1995	Johnson & Johnson Fellowship – <i>biopolymer inclusion bodies</i>

PROFESSIONAL AFFILIATIONS

The Royal Society of Chemistry (*RSC 2016–, Elected Fellow 2016*)
Australasian Society for Biomaterials and Tissue Engineering (*ASBTE 2013-*)
Fulbright Alumni Association (*NSW Chapter Committee 2009-16, Chapter Chair 2014-16*)
Marie Curie Fellows Association (*MCF A 2005-*)
Australian Neutron Beam Users Group (*ANBUG 2012-2016*)
BioEnvironmental Polymer Society (*EDPS 1993-2005*)
The Royal Society for Biology (*RSB 1990-, Elected Fellow 2007*)
Forum for European-Australian Science & Technology Co-Operation (*FEAST 2010-*)
American Chemical Society (*ACS 1993-*)

PROFESSIONAL EXPERIENCE

- 2017 - University of Alabama in Huntsville, Alabama, USA
Professor, Chair, Head – Department of Chemistry
- Introduced a more effective and efficient department structure and processes.
 - Directed development of Department's first Honours and Distance Learning courses.
 - Increased Faculty-Student engagement, through student-driven activities and establishment of lounges, 'Showcase Labs' and 'Student Success Centres'.
 - Directed standardisation of teaching across multiple sections for levels 1 and 2 undergraduate courses.

- Designed industry-supported PhD Chemistry with ‘Academic’, ‘Entrepreneur’ and ‘Executive’ paths; managing approval process through University and State Boards.
 - Reversed enrolment trend in undergraduate majors and minors, increases of 54% and 37% respectively.
 - Research student supervision: 3 PhD, 1 MSc, 5 undergraduates, 2 Pre-med.
- 2016-2019  **Repartech Pty Ltd, Sydney, Australia**
Cofounder & Director
- Validation and commercialisation of Ocurep™, an innovative thin-film, sutureless adhesive with local drug delivery capabilities for ophthalmic surgery.
 - Familiarity with medical device legislation including 501K and ISO13485.
 - Raised over \$1.4 million for commercialisation from national competitive awards:
Prestigious government ‘NSW Health Medical Device Fund Award’
Grand Prize winner - ATP Innovations Ltd: ‘New Medical Technology’.
Winner of the IDE Ltd ‘Vivid Sydney Design Award’.
- 2011 -  **Save Sight Institute, University of Sydney, Sydney, Australia**
Honorary Associate Professor. – Faculty of Medicine
- Supervision of medical practitioners as PhD students.
 - Development of medical devices for ophthalmic surgery.
- 1997-2016  **University of New South Wales, Sydney, Australia**
Associate Professor – School of Biotechnology & Biomolecular Sciences
Leader – Bio/polymers Research Group
- Raised in excess of \$4.7 million from industry and grants in 10 years.
 - Supervision of 19 PhD, 11 MSc and 36 undergraduate Honours research students.
 - Line manager for school technical staff and mentor for junior academics.
 - Member of School Executive Committee during restructuring (2008-2010).
 - Established Level 3 OH&S committee, served as Employer Rep (2008-2010) and Academic Rep (2011-2015): achieved government safety standards.
 - Established school Marketing Committee: served as Chairperson (2008-2013), designed and implemented school branding: enhanced School Recognition by 43%.
 - Biotechnology Degree Director (2005-2007), managed its external review (2015-2016).
 - Chairman of Appointments Committee (2009) for hire of 6 new staff.
 - School Grievance Officer (2011-2013).
 - Pioneered UNSW interactive display for National Science Week, won ‘Best Display’ Award; subsequent adoption across university.
- 2010  **University of Pittsburgh, Pittsburgh, USA.**
Fulbright Senior Scholar - McGowan Institute for Regenerative Medicine
- Development and characterisation of a medical device for enhanced nerve repair.
 - Preparation of extracellular matrix biomaterial.
 - Negotiated collaborative research agreement between UNSW and UPITT.
- 2005-2007  **Forschungszentrum-Jülich GmbH, Jülich, Germany.**
Marie Curie Incoming International Fellow – Institut für Festkörperforschung
- Application of analytical neutron scattering techniques to characterise biopolymers and their natural-synthetic hybrids.
 - Polymer self-assembly into microporous biomaterials.
- 1995-1997  **Bayer AG, Leverkusen, Germany**
Research Scientist – Department of Biotechnology
- Developed industrial biocatalysis process for cellulose substitution.
 - Reduced biocatalyst and waste water by 70%, by-products by 50%.
 - Established and directed industrial scale-up trials.
 - Line manager for technical staff and supervision of visiting practicum students.
- 1993-1996  **University of Massachusetts, Amherst, U.S.A.**
Johnson & Johnson Fellow – Departments of Polymer Science & Engineering and Biochemistry & Molecular Biology

- Supervision of undergraduates and mentoring of postgraduate research students.
- Production and characterisation of new biopolymers, increased yield by 58%.

TEACHING

My teaching focuses on the production and characterisation of polymers, their property-function relationships and applications, as materials and devices in environmental, industrial and medical fields. I use enquiry-based learning to stimulate higher order thinking. My innovative teaching promotes guided discovery as well as abstract reasoning and lateral thinking skills. My application of information technology supports flexibility in course delivery and permits the remote contribution of internationally renowned experts.

Teaching includes design and delivery of lectures and practical classes, setting and grading of examinations; course co-ordination and all aspects of course management.

Created final year elective: 'Medical Biotechnology' (UNSW)

Curriculum development as Program Director for undergraduate Biotechnology Degree (UNSW) created a 'college of experts' using industry professionals, sourced voluntary expert lecturers.

Successfully managed external review of the Biotechnology degree, steered changes through the School and University Teaching Quality Committees.

TEACHING OUTCOMES

Teaching evaluations placed in the top 5% at UNSW and UAH.

'Titans of Teaching' Award (2014) best course in the school for 5 years running.

Innovative Teaching and Educational Technology (ITET) Fellowship (2002) for cost- and learning-effective development of alternatives to traditional wet laboratory practical classes.

Adaption of Biggs SOLO taxonomy to standardise grading by different academics; adopted at UNSW, University of Queensland, Southern Cross University, Aston University (UK) and Izmir Institute of Technology (Turkey).

Innovative replacement of conventional 'wet' lab practical classes with real-life, team-based problem-solving scenarios; realised a 34% increase in 'excellent' student evaluations and learning outcomes. Reported in the UNSW Compendium of Good Teaching Practice.

Developed teaching strategies for Health & Safety, successful implementation increased undergraduate compliance in practical classes by 68%. Published after peer-review in the Journal of Health and Safety in the Environment.

Development of a 'blended classroom' with on-demand, online delivery of lectures.

Directed development of distance learning modules at UAH for College of Nursing, including virtual labs.

RESEARCH

My applied interdisciplinary research focuses on the production and characterisation of biopolymers and their novel applications as Medical Devices. With the support of industrial collaborations, I encourage an innovation culture within my research group to develop novel solutions to real-life problems.

Mentored 4 postdoctoral Fellows, supervision to completion of 15 PhD, 11 MSc and 40 undergraduate research students as well as various visiting researchers including 5 Practicum students. Currently supervise 3 PhD students.

Research highlighted in the media; examples: Sydney Morning Herald, SBS News, Ch10 News, The Australian, ABC Radio, Readers Digest, CBS news (USA), and New Zealand Herald (NZ).

Negotiated international research MOUs between UNSW and Montpellier University, (France) Universität Weihenstephan-Treisdorf (Germany) and Chiang Mai University, (Thailand); served as Faculty Representative.

Developed and negotiated a Joint PhD Program, UNSW-Chiang Mai University, Thailand (2015).

Developed an innovative PhD Chemistry degree at UAH with novel 'Academic', 'Entrepreneur' and 'Executive' paths; managed multi-stakeholders and approval process through University and State Boards.

Regular presentations at international conferences as plenary or invited speaker; recent examples:

- 'Biodeuteration for the Elucidation of Biopolymer Architecture in Biomaterial Composites and Hybrids'. MACRO2014, World Polymer Congress, Chiang Mai, Thailand, 2014 – *Invited Speaker and Chair*
- 'Soft Power and Smart Power in Science and Innovation'. The 2013 Fulbright Symposium, Canberra, Australia, 2013. - *Plenary Speaker*.
- 'SurgiLux: a Novel Thin Film Laser Activated Bioadhesive for Corneal Repair'. CMICBA, Chiang Mai International Conference on Biomaterials and their Applications, Chiang Mai, Thailand, 2011. - *Plenary Speaker and Chair*.

I have served on the advisory panels and organising committees for a number of national and international conferences, recent examples:

- SAS; International Small Angle Scattering Conference, Australia, 2012.
- PACCON; 6th IUPAC Pure and Applied Chemistry Conference, Thailand, 2012.
- CMICBA; International Conference on Biomaterials Applications, Thailand, 2011.

Effective communication of research is a critical part of student education and have funded both postgraduate and undergraduate participation at international conferences.

As Head of Department at UAH, I have increased support for research student participation and coupled this with greater efficiency in marketing.

Under my mentorship a number of my students have won conference scholarships and awards.

RESEARCH FUNDING

My track record demonstrates flexibility in securing research funding, from industry to competitive international grants, for example:

Sole investigator in successful funding submissions to EU-6th Mobility Framework (euro 235k)

Malaysian Palm Oil Board sponsorship for fine pharma products research (RM 425k)

Industrial support for environmental research Westralian Sands Ltd (AU\$ 110k)

Continuous funding from the Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC) from 2003 to 2019.

Long-standing collaboration with the Australian Nuclear Science and Technology Organisation (ANSTO).

SERVICE TO FIELD

Research Panel Member for the Ophthalmic Research Institute of Australia (ORIA), part of the Royal Australian and New Zealand College of Ophthalmologists (RANZCO).

Consultant to federal government's 'Department of Industry, Innovation, Science, Research and Tertiary Education' (DIISTRE); advising on academic research direction and commercialisation.

'Special Advisor' for Thai Government, mentoring junior academics, advising on research policy.

Guest Editor for special edition of *Applied Biosciences*: 'Recent Advances in Surgical Bioadhesives' (2019-2020).

Editor for journal *Bioprocessing and Biotechniques* (2012-2015).

Reviewer for various journals including: *Biomacromolecules*, *Polymer International*, *Acta Biomaterialia*, and *Lasers in Surgery and Medicine*.

National Examiner for grants from the Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC).

International grant examiner for the Deutsche Forschungsgemeinschaft (DFG), the Czech Science Foundation, Hong Kong Prefecture, the Qatar Foundation, Royal Thai Government; Dutch National Research Foundation (STW) and others.

Consultancy; clients include: Woolworths Petrol, 3M, Arthur Anderson Consulting and South Eastern Illawarra Health Services.

Research theses examiner for various universities including: The University of Queensland and The University of California Davies.

STUDENT THESES

Ph.D. (15 completions)

- 2018 R. Russell: *Characterisation of Polyhydroxyalkanoate blends via biodegradation, and modification of material properties using carbon nanotubes.*
- 2015 K. Thomson: *Sutureless eye repair: a biopolymer thin-film, laser-activated adhesive with programmable local drug delivery.*
T. Orfanos: *Bioastronautics: The effect of microgravity on tumorigenesis.*
- 2014 S. Ho: *Modulation of protein expression in wounds via a combination of natural compounds to enhance tissue regeneration in adults.*
D. Daranarong: *Electropolymerized polymers for tissue engineering of nerves.*
- 2013 R. Chan: *Natural-synthetic composites of Poly(hydroxybutyrate)-Poly(ethylene glycol) as potential scaffolds for nerve repair.*
- 2012 T. Ahmed: *Coalescence of ECM and chitosan biomaterials for an advanced sutureless technology.*
- 2008 M.R. Yatim: *Biotransformation of palm olein into sophorolipid biosurfactant.*
- 2007 V. Sanguanchaipaiwong: *Biosynthesis and characterisation of polyhydroxyalkanoate based natural-synthetic hybrid copolymers.*
- 2006 C. Woolnough: *Biodegradation, surface rugosities and biofilm coverage of biopolymers.*
L.E. Rodgers: *The molecular characterisation of sol-gel biocatalysts.*
W. Pulsawat: *Extracellular polymeric substance (EPS) produced by Rhizobium etli M4 and its metal biosorption.*
- 2005 A. Lauto: *Laser-activated biomaterials for tissue repair.*
L. Albertin: *Well defined glycolymers from RAFT polymerization: a chemoenzymatic approach.*
E. Ben-David: *Bacteria as bioindicators of pollution: application of phospholipid profiling to monitor ecological detriment caused by acid rock drainage.*

MSc. (11 completions)

- 2016 R.T. Hassarati
- 2007 L. Aguilar
- 2001 Z. Liang
- 2000 E. Wahyono, E.I. Ryanti
- 1999 W. Pulsawat; C.H-Y. Howard; A. Saufi
- 1998 J.H. Park; W. Wang; H. Lui

Diplom. (1 completion)

- 2007 R.T. Hassarati

Honours. (34 completions)

- 2015 T. Sutherland; J. McConnell
- 2014 J. Chadwick
- 2013 H. Barker; M. Basuki; C. Furze; E. Dodson; M. Parlas; H. Cullen
- 2012 E. Karsten
- 2010 K. Thomson
- 2009 S. Ho; S. Chan; R. Chan; J. Shahbazi

2008 T. Ahmed; M. Lawless; J. Butt

2003 A. Wong; K. Chow; S. Argus; S. Khail; S. Atwa; E. Ping; L.E. Rodgers; B.H. Kwan;
R.P. Lansdown; E. Luong-Van; R. Molony; F. Fong; G.V. Berra. J.I.K.H. Lee; F.S.
Shadwick; Q.M. Vu

PUBLICATIONS:

Books

1. Sanguanchaipaiwong V & Foster, J. **2009** 'BioPEGylation of Polyhydroxyalkanoates.' Lambert Academic Publishing, Cologne, Germany (*ISBN: 978-3-8383-1689-5*)
2. Woolnough, C; Yee, L. & Foster J. **2009** 'Green Plastics: Surface Rugosity, Biofouling and Biodegradation'. Lambert Academic Publishing, Cologne, Germany (*ISBN: 978-3-8383-1733-5*)

Book Chapters

1. Russel, RA; Garvey, C; Darwish, T; Foster, LJR & Holden, PJ. **2015** 'Biopolymer Deuteration for Neutron Scattering and Other Isotope-Sensitive Techniques'. In: 'Isotope labeling of biomolecules labeling Methods', Ed: Kelman, Z. Vol 565, MIE, Academic Press, UK. 97-121.
2. Foster, LJR. **2015** 'Bioadhesives as Surgical Sealants: A Review' In: 'Bioadhesion and Biomimetics: From Nature to Applications' Ed. Bianco-Peled, H. & Davidovich-Pinas, M. Pan Stanford Publishing, Boca Raton, USA. 195-226.
3. Yee, LH & Foster, LJR. **2014** 'Polyhydroxyalkanoates as Packaging Materials: Current Applications and Future Prospects' In: 'Polyhydroxyalkanoate (PHA) Based Blends, Composites and Nanocomposites (RSC Green Chemistry)' Ed. Roy, I; Visakh, PM & Clark, JH. Royal Society of Chemistry, London, UK. 183-207.
4. Foster, LJR. **2010** 'PEGylation and BioPEGylation of Polyhydroxyalkanoates: Synthesis, Characterisation and Applications' In: 'Biopolymers' Ed. Elnashar M. Sciyo, Vienna, Austria. 243-256.
5. Holden, PJ; Foster, LJR; Neilan, BA; Berra, G. & Vu, QM. **2001** 'Characterisation of Novel Salt Tolerant Iron-oxidising Bacteria.' In: 'Biohydrometallurgy' Eds. Ciminelli, VST. & Garcia jnr, O. Elsevier, New York, USA. 283-290.
6. Foster, LJR. **2000** 'The Structural Organization of Polyhydroxyalkanoate Inclusion Bodies.' In: 'Polymers from Renewable Resources: Biopolyesters and Biocatalysis' Eds. Scholz, C. & Gross, R. ACS Books, Washington D.C., USA. 42-66.
7. Foster, LJR; Lenz, RW & Fuller, RC. **1996** 'Intra and Extracellular Enzymatic Degradation of Bacterial Polyesters.' In: 'Hydrogels and Biodegradable Polymers For Bioapplications' Eds. Ottenbrite, R; Park, K. & Huang, S. ACS Books, Washington D.C., USA. 68-92.

Journal Papers

1. Foster, LJR; Chan, RTH; Russell, RA. & Holden, PJ. **2020** 'Using Humidity to Control the Morphology and Properties of Electrospun BioPEGylated Polyhydroxybutyrate Scaffolds.' *ACS Omega* **5**:26476-26485.
2. Tan, J; Foster, LJR & Watson, SL. **2020** 'Corneal Sealants in Clinical Use: A Systematic Review.' *Curr. Eye Res.* **45**(9):1025-1030.
3. Tan, J; Foster, LJR & Watson, SL. **2020** 'Application of a Novel Film Sealant Technology for Penetrating Corneal Wounds. An Ex-Vivo Study.' *Applied Sciences* **10**(9):3193 Doi.org/10.3390/app10093193.
4. Yatim, ARM; Zulkifli, WNFWM; Majid, AMS; Foster, JL & Hayes, DG. **2020** '3-Hydroxypicolinic Acid as an Effective Matix for Sophorolipid Structural Elucidation Using Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry.' *J. Surf. Detergents.* Doi.org/10.1002/jsde.12394 7 Feb.
5. Bartimole, C; Foster, J & Watson, S. **2019** 'The Spectrum of Microbial Keratitis: An Updated Review.' *Open Ophthalmol. J.* **13**:100-130.

6. Turner, NJ; Johnson, SA; Foster, LJR & Badylak, SF. **2018** 'Sutureless Nerve Repair with ECM Bioscaffolds and Laser-Activated Chitosan Adhesive.' *J. Biomed Mater. Res. B: App. Biomater.* 106(5):1698-1711.
7. Russell, RA; Foster, LJR. & Holden, PJ. **2018** 'Carbon Nanotube Mediated Miscibility of Polyhydroxyalkanoate Blends and Chemical Imaging Using Deuterium-Labelled Poly(3-hydroxyoctanoate).' *Eur. Poly. J.* 105(Aug):150-157.
8. Techaikool, P; Daranarong, D; Kongsuk, J; Boonyawan, D; Haron, N; Harley, W; Thomson, K; Foster, LJR & Punyodom, W. **2017** 'Effects of Plasma treatment on Biocompatibility of Poly(L-Lactide-co-ε-caprolactone) (PLCL) and Poly(L-lactide-co-glycolide) (PLGA) Electrospun nanofibrous Membranes.' *Polymer Int* 66(11):1640-16-50.
9. Hassarati, RT; Foster, LJ & Green, RA. **2016** 'Influence of Biphasic Stimulation on Olfactory Ensheathing Cells for Neuroprosthetic Devices.' *Frontiers Neurosci.* 10:1-11.
10. Daranarong, D; Techaikool, P; Intatue, W; Daengngern, R; Thomson, KA; Molloy, R; Kungwan, N; Foster, LJR; Boonyawan, D; Punyodom, W. **2016** 'Effect of Surface Modification of Poly(L-lactide-co-ε-caprolactone) Membranes by Low-Pressure Plasma on Support Cell Biocompatibility' *Surface Coat. Technol.* (DOI:10.1016/j.surfcoat.2016.07.058).
11. Hassarati, R; Marçal, H; Foster, LJR. & Green, RA. **2016** 'Biofunctionalisation of Conductive Hydrogel Coatings to Support Olfactory Ensheathing Cells at Implantable Electrode Interfaces'. *J. Biomed. Mater. Res B: App Biomater.* 104(4):712-722.
12. Foster, LJR; Ho, S; Hook, J; Basuki, M. & Marçal, H. **2015** 'Chitosan as a Biomaterial: Influence of Degree of Deacetylation on its Physiochemical, Material and Biological Properties.' *PLoS ONE*, DOI:10.1371/journal.pone.0135153
13. Tan, J; Watson, S. Foster, J. **2015** 'The Efficacy of N-Butyl-2 Cyanoacrylate (Histoacryl) for Sealing Corneal Perforation: A Clinical Case Series and Review of the Literature'. *Clin Exp Ophthalmol.* 6(2):2-6
14. Doranarong, D; Chan, RTH; Wanandy NS; Molloy, R; Punyodom, W. & Foster LJR. **2014** 'Electrospun Polyhydroxybutyrate and Poly(L-lactide-co-ε-caprolactone) Composites as Nanofibrous Scaffolds'. *BioMed Res. Int.* Volume 2014 (2014), Article ID 741408, 12 pages. DOI:10.1155/2014/741408.
15. Russell, RA; Darwish, TA; Puskar L; Martin, DE; Holden PJ. & Foster, LJR. **2014** 'Deuterated Polymers for Probing Phase Separation Using Infrared Microspectroscopy.' *Biomacromolecules* 15(2):644-649.
16. Doranarong, D; Thapsukhon, B; Wanandy, NS; Molloy, R; Punyodom, W. & Foster, LJR. **2014** 'Application of Low Loading Collagen in Electrospun Poly(L-lactide-co-ε-caprolactone) Nanofibrous Scaffolds to Promote Cellular Biocompatibility.' *Polymer Int.* 63(7):1254-1262.
17. Ho, S; Marçal, H. & Foster, LJR. **2014** 'Towards Scarless Wound Healing: a Comparison of Protein Expression Between Human Adult and Foetal Fibroblasts.' *BioMed Res Int.* Volume 2014, Article ID 676493, 10 pages <http://dx.doi.org/10.1155/2014/676493>.
18. Chan, RTH; Russell, RA; Marçal, H; Lee, TH; Holden, PJ. & Foster, LJR. **2014** 'BioPEGylation of Polyhydroxybutyrate (PHB) Promotes Nerve Cell Health and Migration.' *Biomacromolecules* 15(1):339-349.
19. Chan, R; Marçal, H; Ahmed, T; Russell, R; Holden, P. & Foster, LJR. **2013** 'Poly(ethylene glycol) Modulated Cellular Biocompatibility of Polyhydroxyalkanoate Films'. *Polymer Int.* 62(6):884-892.
20. Woolnough, CA; Yee, LH; Charlton, TS. & Foster LJR. **2013** 'A Tuneable Switch for Controlling Environmental Degradation of Bioplastics: Addition of Isothiazolinone to Polyhydroxyalkanoates'. *PLoS ONE* 8(10): e75817. doi:10.1371/journal.pone.0075817
21. Karsten, E; Watson, SL. & Foster, LJR. **2012** 'Diversity of Microbial Species Implicated in Keratitis: A Review'. *The Open Ophthalmol J.* 6:117-131.

22. Foster, LJR. **2012** 'Health and Safety in University Laboratory Classes: Graduate Attribute?' *J Health Safety Environ.* 28(2):89-100.
23. Foster, LJR. & Karsten, EA. **2012** 'A Chitosan Based, Laser Activated Thin Film Surgical Adhesive, 'SurgiLux': Preparation and Demonstration'. *J Vis Exp.* 68:e3527 DOI: 10.3791/3527
24. Marcal, H; Ahmed, T. Wanandy, N. & Foster, LJR. **2012** 'Chitosan Bioadhesives and Extracellular Matrix Bio-scaffolds for Use in Spinal Cord Repair and Regeneration'. *Adv Mater Res.* 506:19-22.
25. Thomson, K; Shahbazi, J; Marcal, H. & Foster, LJR. **2012** 'SurgiLux: A Novel Thin Film Laser Activated Bioadhesive for Corneal Repair'. *Adv Mater Res.* 506:7-10.
26. Marcal, H; Ahmed, T; Badylak, S; Tottey, S. & Foster, LJR. **2012** 'A Comprehensive Expression Protein Profile of Extracellular Matrix Biomaterial Derived from Porcine Urinary Bladder'. *Regen Med.* 7(2):159-166.
27. Ahmed, T; Marcal, H; Johnson, S; Brown, BN. & Foster, LJR. **2012** 'Coalescence of Extracellular Matrix (ECM) from Porcine Urinary Bladder (UBM) with a Laser-Activated Chitosan Based Surgical Adhesive.' *J Biomater Sci: Poly Edn.* 23(12):1521-1538.
28. Chan, R; Marcal, H; Russell, R; Holden, P. & Foster, LJR. **2011** 'Application of Polyethylene Glycol to Promote Cellular Biocompatibility of Polyhydroxybutyrate Films'. *Int J Poly Sci: Poly Biomater Tiss Eng* 2011: 473045, DOI: 10.1155/2011/473045.
29. Chan, R; Garvey, C; Marcal, H; Russell, R; Holden, P. & Foster, LJR. **2011** 'Manipulation of Polyhydroxybutyrate Properties through Blending with Ethyl- Cellulose for a Composite Biomaterial'. *Int J Poly Sci: Poly Biomater Tiss Eng* 2011: 651549, DOI: 10.1155/2011/651549.
30. Shahbazi, J; Marcal, H; Watson S; Wakefield, D; Sarris, M & Foster, LJR. **2011** 'Sutureless Sealing of Penetrating Corneal Wounds Using a Laser-activated Thin Film Adhesive'. *Lasers Surg Med.* 43:490-498.
31. Foster, LJR & Butt, J. **2011** 'Chitosan Films are NOT Antimicrobial'. *Biotech Lett* 33(2):417-421.
32. Foster, LJR; Thomson, K; Marcal, H; Butt, J; Watson, S. & Wakefield, D. **2010** 'A Chitosan-vancomycin Composite Biomaterial as a Laser Activated Surgical Adhesive with Regional Antimicrobial Activity'. *Biomacromolecules* 11(12):3563-3570
33. Ahmed, T; Marcal, H; Lawless, M; Wanandy, N; Chiu, A. & Foster, LJR. **2010** 'Polyhydroxybutyrate and its Copolymer with Polyhydroxyvalerate as Biomaterials: Influence on Progression of Stem Cell Cycle. *Biomacromolecules* 11(10):2707-2715.
34. Blaber, E; Marcal, H; Foster, LJR & Burns, BP. **2010** 'In Space No One Can Hear You Sneeze'. *Australasian Sci Mag* 102:29-31.
35. Woolnough, CA; Yee, L; Charlton, T. & Foster, LJR. **2010** 'Environmental Degradation and Biofouling of 'Green' Plastics Including Short and Medium Chain Length Polyhydroxyalkanoates'. *Polymer Int.* 59:658-667.
36. Foster, LJR. & Tighe, BJ. **2009** 'In vitro Hydrolytic Degradation of Centrifugally-spun Polyhydroxybutyrate-pectin Composite Fibres'. *Polymer Int.* 58:1442-1451.
37. Lauto A, Foster LJ, Sarris M, McKenzie G, Stoodley M. **2008** 'Sutureless Nerve Repair with Laser-Activated Chitosan Adhesive: A Pilot *In Vivo* Study. *Photomed Laser Surg.* 26(3):104-105.
38. Marçal, H; Wanandy, NS; Sanguanchaipaiwong, V; Woolnough, CE; Lauto, A; Mahler, SM. & Foster. LJR. **2008** 'BioPEGylation of Polyhydroxyalkanoates: Influence on Properties and Satellite Stem Cell Cycle'. *Biomacromolecules* 9(10):2719-2726.
39. Woolnough, CA; Charlton, T; Yee, L; Sarris, M. & Foster, LJR. **2008** 'Surface Changes in Polyhydroxyalkanoate Films During Biodegradation and Biofouling'. *Polymer Int.* 57(9):1042-1051.

40. Mawad, D; Lauto, A; & Foster, LJR. **2008** 'Drug-Delivery Study and Estimation of Polymer-Solvent Interaction Parameter for Bisacrylate Ester-Modified Pluronic Hydrogels'. *Int. J Pharmaceutics*. 360(1-2):231-235.
41. Russell, RA; Holden, PJ; Wilde, KL; Garvey, CJ; Hammerton, KM. & Foster, LJR. **2008** 'In vivo deuteration strategies for neutron scattering analysis of bacterial polyhydroxyoctanoate.' *Eur. J. Biophys.* 37(5):711-715.
42. Marçal, H; Badylak, SF; Sellaro, TL; Lauto, A; Foster, LJR. & Mahler, S. **2008** 'The Coalescence of Decellularized Tissue Scaffolds, Laser-Activated Chitosan Bioadhesive and Olfactory Ensheathing Cells For Tissue Repair and Regeneration of the Spinal Cord'. *Lasers Med. Sci.* 23(1):96.
43. Lauto, A; Mawad, D. & Foster, LJR. **2008** 'Adhesive Biomaterials for Tissue Reconstruction.' *Chem. Tech. Biotech.* 83(4):464-472.
44. Foster, LJR; Schwahn, D; Pipich, V; Holden, PJ. & Richter, D. **2008** 'SANS Characterisation of Polyhydroxyalkanoates and their bioPEGylated Hybrids in Solution'. *Biomacromolecules* 9:314-320.
45. Lauto, A; Foster, LJ; Sarris, M; McKenzie, G. & Stoodley, M. **2008** 'Sutureless Nerve Anastomosis with Laser-Activated Chitosan Adhesive'. *Lasers Med. Sci.* 23(1):104-105.
46. Russell, RA; Holden, PJ; Wilde, KL; Hammerton, KM. & Foster, LJR. **2007** 'Production and Use of Deuterated Polyhydroxyoctanoate in Structural Studies of PHO Inclusions.' *J. Biotech.* 132(3):303-305.
47. Foster, LJR. **2007** 'Biosynthesis, Properties and Potential of Natural-Synthetic Hybrids of Polyhydroxyalkanoates and Polyethylene Glycols.' *Appl. Micro. Biotech.* 75:1241-1247.
48. Foster, LJR. **2007** 'Using a Continual Improvement Cycle to Create Targeted Changes in Course Delivery and Learning Outcomes' *UNSW Compendium of Good Learning and Teaching Practice* 5:75-91.
49. Lauto, A; Stoodley, M; Marcel, H; Avolio, A; Sarris, M; McKenzie, G; Sampson, DD. & Foster, LJ. **2007** 'In vitro and in vivo Tissue Repair with Laser-activated Chitosan Adhesive' *Las. Surg. Med.* 39:19-27.
50. Lauto, A; Stoodley, M; Avolio, A. & Foster, LJR. **2006** 'Laser Chitosan Adhesive for Tissue Repair'. *Proc. SPIE.* 6078:1-13.
51. Rodgers, LE; Knott, RB; Holden, PJ; Pike, KJ; Hanna, JV; Foster, LJR. & Bartlett, JR. **2006** 'Structural Evolution and Stability of Sol-gel Biocatalysts' *Physica B: Condensed Matter* 385-386:508-510.
52. Foster, LJR; Knott, R; Sanguanchaipaiwong, V. & Holden, PJ. **2006** 'Polyhydroxyalkanoate-based Natural-Synthetic Hybrid Copolymer Films: a Small Angle Neutron Scattering Study' *Physica B: Condensed Matter* 385-386:770-772.
53. Russell, RA; Holden, PJ; Garvey, CJ; Wilde, KL; Hammerton, KM & Foster, LJR. **2006** 'Investigation of the Phase Morphology of Bacterial PHA Inclusion Bodies by Contrast Variation using SANS' *Physica B: Condensed Matter* 385-386:859-861.
54. Foster, LJR; Russell, RA; Sanguanchaipaiwong, V; Stone, DJM; Hook, JM. & Holden, PJ. **2006** 'Biosynthesis and Characterisation of Deuterated Polyhydroxyoctanoate (PHO)' *Biomacromolecules* 7:1344-1349.
55. Albertin, L; Stenzel, MH; Barner-Kowollik, C; Foster, LJR & Davis, TP. **2005** 'Well Defined Diblock Glycopolymers from RAFT Polymerisation in Homogeneous Aqueous Medium' *Macromolecules* 38:9075-9084.
56. Foster, LJR; Sanguanchaipaiwong, V; Gabelish, C. & Hook, J. **2005** 'A Natural-Synthetic Hybrid Copolymer of Polyhydroxyoctanoate-Diethylene Glycol: Biosynthesis and Properties.' *Polymer* 46(17):6587-6594.
57. Rodger, LE; Holden, PJ; Knott, RB; Finnie, KS; Bartlett, JM. & Foster, LJR. **2005** Effect of Sol-Gel Encapsulation on Lipase Structure and Function: A Small Angle Neutron Scattering Study.' *J. Sol-Gel Sci. Tech.* 33:63-69.

58. Albertin, L; Stenzel, MH; Barner-Kowollik, C; Foster, LJR & Davis, TP. **2005** 'Solvent and Oxygen Effects on the Free Radical Polymerisation of 6-*O*-Vinyladipoyl-D-Glucopyranose' *Polymer* 46:2831-2835.
59. Lauto, A; Hook, J; Doran, M; Comacho, F; Aviolo, A; Poole-Warren, L. & Foster, LJR. **2005** 'Chitosan Adhesive for Laser Tissue-Welding: *in vitro* Characterisation.' *Lasers Surg. Med.* 36(3):193-2001.
60. Foster, LJR. & Tighe, BJ. **2005** 'Centrifugally-spun Polyhydroxybutyrate Fibres: Accelerated Hydrolytic Degradation Studies.' *J. Polym. Deg. Stab.* 87(1):1-10.
61. Lauto, A; Foster, J. & Avolio, A. **2004** 'Albumin-Genipin Solder for Laser Tissue-Welding'. *Proc. SPIE.* 51322: 124-129.
62. Lauto, A; Foster, LJR; Ferris, L; Aviolo, A; Zwaneveld, N. & Poole-Warren, L. **2004** 'Albumin-Genipin Solder for Laser Tissue-Welding.' *Lasers Surg. Med.* 35(2):140-145.
63. Ben-David, EA; Holden, PJ; Stone, DJM; Harch, BD. & Foster, LJR. **2004** 'The Use of Phospholipid Fatty Acid Analysis to Measure Impact of Acid Rock Drainage on Microbial Communities in Sediments.' *Microb. Ecol.* 48(3):300-315.
64. Albertin, L; Stenzel, M; Barner-Kowollik, C; Foster, LJR. & Davis, TP. **2004** 'Well-Defined Glycopolymers from RAFT Polymerisation: Poly(methyl-6-*O*-methacryloyl- α -D-glucoside) and its Block Copolymers with 2-Hydroxyethyl Methacrylate'. *Macromolecules* 37(20):7530-7537.
65. Foster, LJR; Kwan, BH. & Vancov, T. **2004** 'Microbial Degradation of the Organophosphorous Pesticide, Ethion' *FEMS Microbiol. Lett.* 240(1):49-53.
66. Holden, PJ; Russell, RA; Stone, DJM; Garvey, CJ. & Foster, LJR. **2004** 'In vivo Deuteration of a Native Bacterial Biopolymer for Structural Elucidation using SANS.' *Physica B: Condensed Matter* 350(1-3):643-646.
67. Sanguanchaipaiwong, V; Gabelish, CL; Hook, J; Scholz, C. & Foster LJR. **2004** 'Biosynthesis of Natural-Synthetic Hybrid Copolymers: Polyhydroxyoctanoate-Diethylene Glycol.' *Biomacromolecules* 5(2):643-649.
68. Albertin, L; Kohlert, C; Stenzel, M; Foster, LJR. & Davis, TP. **2004** 'Chemoenzymatic Synthesis of Narrow-Polydispersity Glycopolymers: Poly(6-*O*-Vinyladipoyl-D-Glucopyranose).' *Biomacromolecules.* 5(2):255-260.
69. Moy, B; Neilan, B; Foster, LJR; Madgewick, J. & Rogers, PL. **2003** 'Screening, Identification and Kinetic Characterisation of a Bacterium for Mn(II) Uptake and Oxidation.' *Biotech Lett.* 25(17):1407-1413.
70. Foster, LJR; Catzel, D; Atwa, S; Zarka M. & Mahler, SJ. **2003** 'Increase in Synthesis of Human Monoclonal Antibodies by Transfected Sp2/0 Myeloma Mouse Cell Line Under Conditions of Microgravity.' *Biotech Lett.* 25(15): 1271-1274.
71. Pulsawat, W; Leksawasdi, N; Rogers, PL. & Foster, LJR. **2003** 'Anion Effects on Biosorption of Mn(II) by Extracellular Polymeric Substance (EPS) from *Rhizobium etli*.' *Biotech Lett.* 25(15), 1267-1270.
72. Hao, X; Albertin, L; Foster, LJR; Davis, TP. & Barner-Kowollik, C. **2003** 'A New Chemo-Enzymatic Route to Side-Chain Liquid Crystalline Polymers: The Synthesis and Polymerisation of 6-(-4-Methoxybiphenyl-4'-oxy)hexyl Vinyl Hexanediaote.' *Macromol. Biosci.* 3:675-683.
73. Lauto, A; Stewart, RB; Felsen, D; Foster J; Poole-Warren, L. & Poppas, DP. **2003** 'Low Temperature Solder for Laser Tissue-Welding'. *Proc. SPIE.* 5287: 83-90.
74. Rodgers, LE; Holden, P.J. & Foster, LJR. **2002** 'Culture of *Acidiphilium cryptum* BV1 with Halotolerant *Alicyclobacillus*-like spp.: Effects on Cell Growth and Iron Oxidation.' *Biotech. Lett.* 24, 1519-1524.
75. Foster, LJR; Saufi, A. & Holden, PJ. **2001** 'Environmental Concentrations of Polyhydroxyalkanoates and their Potential as Bioindicators of Pollution'. *Biotech Lett.* 23, 893-898.

76. Foster, LJR; Davies, SM. & Tighe, BJ. **2001** 'Centrifugally-spun Polyhydroxybutyrate Fibres: Effect of Process Solvent on Structure, Morphology and Cell Response'. *J. Biomater. Sci. Polymer Edn.* 12(3), 317-336.
77. Foster, LJR, Moy, YP. & Rogers, PL. **2000** 'Metal Binding Capabilities of *Rhizobium etli* M4 and its Extracellular Polymeric Substances'. *Biotech Lett.* 22, 1757-1760.
78. Foster, LJR; Lenz, RW. & Fuller, RC. **1999** 'Intracellular Depolymerase Activity in Isolated Inclusion Bodies Containing Polyhydroxyalkanoates with Long Alkyl and Functional Substituents in the Side Chain'. *Int. J. Biolog. Macromol.* 26, 187-192.
79. Stuart, ES; Foster, LJR; Fuller, RC. & Lenz, RW. **1996** 'Intracellular Depolymerase Functionality and Location in *Pseudomonas oleovorans* Inclusions containing Polyhydroxyoctanoate'. *Int. J. Biolog. Macromol.* 19, 171-176.
80. Foster, LJR; Stuart, ES; Tehrani, A; Fuller, RC. & Lenz, RW. **1996** 'Intracellular Depolymerase and Polyhydroxyoctanoate Granule Integrity in *Pseudomonas oleovorans*'. *Int. J. Biolog. Macromol.* 19, 177-183.
81. Foster, LJR. & Tighe, BJ. **1995** 'An Enzymatic Assay of Hydroxybutyric Acid Monomer Formation in Poly(- β -hydroxybutyrate) Degradation Studies'. *Biomaterials* 16, 341-343.
82. Foster, LJR; Zervas, SJ; Fuller, RC. & Lenz, RW. **1995** 'The Biodegradation of Poly-3-hydroxyalkanoates, PHAs, with Long Alkyl Substituents by *Pseudomonas maculicola*'. *Biodegradation* 6: 67-73.
83. Foster, LJR. & Tighe, BJ. **1994** 'The Degradation of Gel-Spun Poly(- β -hydroxybutyrate) Wool'. *J. Environ. Polym. Deg.* 2(3), 185-194.
84. Foster, LJR; Fuller, RC. & Lenz, RW. **1994** 'The Quantitative Determination of Intracellular Depolymerase Activity in *Pseudomonas oleovorans* Inclusions Containing Poly-3-hydroxyalkanoates with Long Alkyl Substituents'. *FEMS Microbiol. Lett.* 118, 279-282.

Patents

1. Poole-Warren, LA; Foster, LJR & Lauto, A; 'Bioadhesive Film for Tissue Repair' *EP1796747. DK1796747T3US*
2. Lauto, A; Poole-Warren, LA. & Foster, LJR. 'Bioadhesive for Tissue Repair' *US9029349B2*.
3. Koch, R; Berendes, F; Foster, J; Rast, HG; Engelhardt, J; Neubauer, J; Koch, W & Szablikowski, K. 'Method for Producing Cellulose Derivatives' *US6146858A, EP0996640B1, DK0996640T3*.

Conference Publications

1. Tan, J; Watson, SL & Foster, LJR. **2021** Chitosan Adhesive Film for Corneal Surgery. *ARVO Annual Meeting, (accepted)*.
2. Trice A & Foster, LJR. **2020** Mechanical Properties of a New Absorbable Monofilament Suture: 'Prototype PLC'. *3rd Annual Materials Science Student Research Symposium, 17th Jan, Birmingham AL, USA*. Abstracts
3. Tan, J; Foster, J & Watson, S. **2019** Laser Activated Thin-Film Adhesive for Sealing Full Thickness Corneal Wounds: An in vivo Study. *ARVO Annual Meeting, 28th April – 2nd May^l Vancouver, Canada*. Abstracts, 3146939. *IOVS* 60(9):4662.
4. Tan, J; Watson, SL & Foster, LJR. **2018** An Ocular Adhesive for Corneal Wound Sealing: An ex-vivo Study. *50th Annual Scientific Congress of The Royal Australian and New Zealand College of Ophthalmologists, 17-21st Nov. Adelaide, Australia*. Abstracts, 150. *Clin. Exp. Ophthalmol.* 46(S1):75.
5. Harley, W; Chan, RT; Russell, RA; Holden PJ; McConnell; JW & Foster, LJR. **2016** Improving the Mechanical Properties of Nanofibrous Scaffolds:

- Poly(hydroxybutyrate)/Diethylene Glycol Nanocomposites. *8th Internat. Nanomed. Conference, 27-29th June, Coogee Beach, Australia*. Abstracts.
6. McConnell, JW; Chan, RT; Furze, C; Harley, W; Russell, RA; Holden PJ & Foster, LJR. **2016** Humidity Control on the Nanoscale: Polyhydroxyalkanoate-based Biomaterials. *8th Internat. Nanomed. Conference, 27-29th June, Coogee Beach, Australia*. Abstracts.
 7. Hassarati, RT; Foster, LR; Asplund, ML & Green, RA. **2016** Electrical Stimulation of Cells in Living Bioelectronic devices. *Front. Bioeng. Biotechnol. Conference Abstracts: 10th World Biomaterials Congress (WBC16), 17-22nd May, Montréal, Canada*. doi: 10.3389/conf.FBIOE.2016.01.00455
 8. Foster, LJR. **2015** BioPEGylation of Polyhydroxyalkanoates Promotes Nerve Cell Biocompatibility. *35th Australasian Polymer Symposium, 35APS, 12-15th July, Gold Coast, Australia*, Abstracts.
 9. Foster, LJR. **2015** BioPEGylated Polyhydroxyalkanoates as Biomaterials? *10th International Conference on the Physical Properties and Applications of Advanced Materials (ICPMAT2015) 17-21st Nov, Chiang Mai, Thailand*. Abstracts: IV-FM3, pg.43.
 10. Russell, R; Darwish, T; Holden, P. & Foster, LJR. **2015** Deuterium Labelling at Australia's National Deuteration Facility: Characterization of Biopolymer Nanocomposite Systems. *10th International Conference on the Physical Properties and Applications of Advanced Materials (ICPMAT2015) 17-21st Nov, Chiang Mai, Thailand*. Abstracts: AO2.
 11. McConnell, JW; Chan, RT; Furze, C; Harley, W; Russell, RA; Holden PJ & Foster, LJR. **2015** Humidity Control on the Nanoscale: Polyhydroxyalkanoate-based Biomaterials. *10th International Conference on the Physical Properties and Applications of Advanced Materials (ICPMAT2015) 17-21st Nov, Chiang Mai, Thailand*. Abstracts: SP31.
 12. Foster, LJR & Holden PJ. **2014** Biodeuteration for the Elucidation of Biopolymer Architecture in Biomaterial Composites and Hybrids. *IUPAC World Polymer Congress MACRO2014, 6-11th July, Chiang Mai, Thailand*, Abstracts
 13. Holden, PJ; Russell, RA; Garvey, CJ. & Foster LJR. **2014** Probing the phase morphology of polymer blends using deuterated biopolyesters and neutron scattering or infrared microspectroscopy. *8th International Conference on Nanostructured Polymers and Nanocomposites, ECNP, 16-19th Sept., Dresden, Germany*, Abstracts
 14. Hassarati, RT; Foster, LJ. & Green, RA. **2014** Conductive hydrogel coatings for improved electrode performance. *23rd Annual Conference of the Australasian Society for Biomaterials and Tissue Engineering, ASBTE, 22-24th April, Lorne, Australia*, Abstracts pg.105.
 15. Daranarong, D; Chan, RTH; Wanandy, NS; Molloy, R; Punyodom, W. & Foster, LJR. **2014** Electrospun Membranes of Poly(L-lactide-co- ϵ -Caprolactone) with Various Loadings of Polyhydroxybutyrate for Use as Absorbable Nerve Guides. *23rd Annual Conference of the Australasian Society for Biomaterials and Tissue Engineering, ASBTE, 22-24th April, Lorne, Australia*, Abstracts pg.114.
 16. Punyodom, W; Daranarong, D; Molloy, R; Sananpanich, K; Chattipakon, N; Chaisuksant, V. & Foster, LJR. **2014** In Vivo Testing in the Rat Model of the Effect of Low Collagen in Electrospun Poly(L-lactide-co- ϵ -Caprolactone) Nerve Guide Scaffolds. *23rd Annual Conference of the Australasian Society for Biomaterials and Tissue Engineering, ASBTE, 22-24th April, Lorne, Australia*, Abstracts pg.135.
 17. Foster, LJR. **2014** BioPEGylation of Polyhydroxyalkanoates Enhances Biocompatibility. *23rd Annual Conference of the Australasian Society for Biomaterials and Tissue Engineering, ASBTE, 22-24th April, Lorne, Australia*, Abstracts pg.86.
 18. Tan, J; Watson, SL. & Foster, LJR. **2013** Efficacy of Corneal Gluing Procedures. *45th Annual Scientific Congress of the Royal Australian and New Zealand College of Ophthalmologists (RANZCO2013), 2-6th Nov., Hobart, Tasmania, Australia*, Abstracts.

19. Russell, RA; Darwish, T; Puskar, L; Martin, D; Foster, LJR. & Holden, PJ. **2013** Mapping Phase Separation of Deuterated/Hydrogenated Biopolymer Blends using Infrared Microspectroscopy. *7th International Workshop on Infrared Microscopy and Spectroscopy with Accelerator Based Sources (WIRMS 2013), 10-14th Nov. Melbourne, Australia*, Abstracts.
20. Orfanos, T; Marcal, H. & Foster LJR **2013** Influence of Microgravity on Protein Expression by Cancer Cell Lines. *Human Proteome Organisation 12th Annual World Congress HUPO, 14-18th Sept., Yokohama, Japan*, Abstracts.
21. Cullen, H; Marcal, H; Wanandy, N. & Foster, LJR. **2013** Gravitational Biology: The Influence of Microgravity on cell-scaffold interactions. *Australian Astrobiology Meeting 2013, Sydney, Australia*, Abstracts pg.13.
22. Russell, R; Darwish, T; Puskar, L; Martin, D; Foster, LJR. & Holden, PJ. **2012** Mapping Phase Separation of Deuterated/Hydrogenated Biopolymer Blends using Infrared Microspectroscopy. *Australian Synchrotron Users Meeting, 29-30th Nov., Melbourne, Australia*, Abstracts, pg.60.
23. Foster, LJR; Russell R. & Holden, PJ. **2012** Polyhydroxyalkanoates and their BioPEGylated Hybrids: Characterisation using Biodeuteration and SANS. *International Small Angle Scattering Conference (SAS2012), 18th-23rd November, Sydney, Australia*, Proceedings (peer reviewed)
24. Papantoniou, PJ; Dudzik, JM; Starra, E; Papantoniou, LGC; Thomson, K. & Foster LJR. **2012** Mechanical Properties of Catheters used for post-Operative Pain Relief by Infiltration of Local Anaesthetic. *Australian Orthopaedic Association 72nd Annual Scientific Meeting (AOA ASM), Sydney, Australia*, Abstracts.
25. Chan, TH; Marcal, H; Russell, RA; Holden, PJ. & Foster, LJR. **2012** Polyhydroxybutyrate and Polyethylene Glycol Composites as Biomaterials for Biomedical Applications. *J Tiss Eng Regen Med.* 6(S1):208 (peer-reviewed)
26. Foster, LJR. **2012** BioPEGylation of Polyhydroxyalkanoates as New Biomaterials? *6th Pure and Applied Chemistry Conference (PACCON), 10-13th January, Chiang Mai, Thailand*. Proceedings pp68-71 (peer-reviewed)
27. Foster, LJR, Russell, R & Holden, PJ. **2012** Characterisation of bioPEGylated Polyhydroxyalkanoates using Small Angle Neutron Scattering (SANS). *6th Pure and Applied Chemistry Conference PACCON, 10-13th January, Chiang Mai, Thailand*. Abstracts BIP-P-028 (peer-reviewed)
28. Foster, LJR; Russell, R. & Holden, PJ. **2012** Biodeuteration of Polyhydroxyalkanoates. *6th Pure and Applied Chemistry Conference PACCON, 10-13th January, Chiang Mai, Thailand*. Abstracts BIP-P-029 (peer-reviewed)
29. Karsten, E; Thomson, K; Watson, S. & Foster, LJR. **2012** Chitosan-based Adhesive biopolymer for Ocular Drug Delivery. *International Symposium on Bio-Polymers (ISBP), Cairns, Australia* Abstracts.
30. Thomson, K; Jamard, J. & Foster, LJR. **2012** Solvent and pH Manipulation of Chitosan Thin Films for Possible Improvements in the Physical Properties of Laser-Activated Adhesion of Biopolymer Thin Films. *International Symposium on Bio-Polymers (ISBP), Cairns, Australia* Abstracts.
31. Donraporn, D; Punyoderm, W; Molloy, R. & Foster, LJR **2012** Poly(L-Lactide-co-ε-Caprolactone)/Collagen Electrospun Tubes for use as Nerve Conduits. *International Symposium on Bio-Polymers (ISBP), Cairns, Australia* Abstracts.
32. Russell, R; Holden, PJ. & Foster, LJR. **2012** Mapping Phase Separation of Deuterated/Hydrogenated Biopolymer Blends using Infrared Microspectroscopy. *International Symposium on Bio-Polymers (ISBP), Cairns, Australia* Abstracts.

33. Thomson, K. & Foster, LJR. **2012** Antibiotics Right Where You Need Them: A Surgical Adhesive with Local Drug Delivery. *International Conference on Nanomedicine (ICN 2012)*, Sydney, Australia Abstracts.
34. Orfanos, T; Marcal, H; Wanandy, N. & Foster LJR **2012** Bioastronautics: The Effect of Microgravity on Tumorigenesis. (*HUPO*) Vienna, Austria Abstracts No.98
35. Ho, S; Marçal, H; Wanandy, N. & Foster, LJR **2012** Dermal Wound Healing: A Comprehensive Expression Proteome Profile of Human Foetal Versus Adult Skin. (*HUPO*) Vienna, Austria Abstracts No.66
36. Russell, RA; Holden PJ & Foster, LJR. **2012** Mapping Phase Separation of deuterated/Hydrogenated Polymer blends Using Infrared Microspectroscopy. *33rd Australasian Polymer Symposium (APS)*, Hobart, Australia. Abstracts p220.
37. Ahmed, T; Marcal, H; Dinnes, D; Badylak, S. & Foster, LJR. **2011** Urinary Bladder Matrix in Conjunction with Laser Activated Chitosan based Adhesive – Sutureless Nerve Repair? *Tissue Engineering and Regenerative Medicine International Society (TERMIS-EU2011)*, Granada, Spain. *Hist Histopathol.* Abstracts (peer-reviewed)
38. Foster, LJR. **2011** SurgiLux: a Novel Thin Film Laser Activated Bioadhesive for Corneal Repair. *Chiang Mai International Conference on Biomaterials and their Applications (CMICBA)*, Chiang Mai, Thailand. Abstracts (peer-reviewed)
39. Chan, RTH; Marcal, H; Russell, RA; Holden, PJ & Foster, LJR **2011** Promoting Cell Adhesion to Poly(hydroxybutyrate) using Poly(ethylene Glycol). *Chiang Mai International Conference on Biomaterials and their Applications (CMICBA)*, Chiang Mai, Thailand. Abstracts.
40. Marcal, H; Ahmed, T. Badylak, S & Foster, LJR **2011** Spinal Cord Repair and Regeneration: The Application of Bioadhesives and Extracellular Matrix Bio-Scaffolds. *Chiang Mai International Conference on Biomaterials and their Applications (CMICBA)*, Chiang Mai, Thailand. Abstracts.
41. Ho, S; Marcal, H; Wanandy, N; Shahbazi, J; Ahmed, T & Foster, LJR. **2011** A Laser Activated, Thin Film Surgical Adhesive, SurgiLux: Influence of Deacetylation. *Chiang Mai International Conference on Biomaterials and their Applications (CMICBA)*, Chiang Mai, Thailand. Abstracts.
42. Ahmed, T; Marcal, H; Dinnes, D; Badylak, SF. & Foster, LJR **2011** Urinary Bladder Matrix in Conjunction with Laser Activated Chitosan Adhesive – Sutureless Nerve Repair? *Tissue Engineering and Regenerative Medicine International Society (TERMIS-AP2010)*, Madrid, Spain. Abstracts.
43. Russell, RA; Holden, PJ; Appavou, M-S; Yun, SI & Foster, LJR. **2010** PHA fractionation for Polymer Chain Analysis in Dilute Solution. *International Symposium on BioPolymers (ISBP)*, Stuttgart, Germany. Abstracts P91.
44. Russell, RA; Holden, PJ; Appavou, M-S; Yun, SI & Foster, LJR. **2010** Modification of PHA Biopolymers by Addition of Carbon Nanotubes. *International Symposium on BioPolymers (ISBP)*, Stuttgart, Germany. Abstracts P158.
45. Marcal, H; Ahmed, T; Badylak, SF. & Foster, LJR **2010** Photomodulated Bioadhesive and Enhanced Wound Repair. *Congress of the International Association of Lasers in Medicine and Surgery, IALMS 2010*, Florence, Italy, Abstracts.
46. Ho, S; Marcal, H; Wanandy N. & Foster, LJR **2010** Wound Healing: A Comparative Expression Secretome Profile of Foetal Versus Adult Skin. *Human Proteome Organisation (HUPO)*, Sydney, Australia. Abstracts.
47. Ahmed, T; Marcal, H; Badylak, SF. & Foster, LJR **2010** Enhanced Wound Repair Through the Coalescence of Urinary Bladder Matrix and Laser Activated Chitosan Bioadhesive. *Tissue Engineering and Regenerative Medicine International Society (TERMIS-AP2010)*, Sydney, Australia. Abstracts.

48. Shahbazi, J; Marcal, H; Wanandy, N; Watson, S; Wakefield, D. & Foster, LJR. **2010** Laser Activated Chitosan-Based Bioadhesive for Ocular Tissue Regeneration in Wound Healing Applications. *Tissue Engineering and Regenerative Medicine International Society (TERMIS-AP2010), Sydney, Australia*. Abstracts 105.
49. Ho, S; Marcal, H; Wanandy, N. & Foster, LJR **2010** Influence of Deacetylation in Chitosan-Based, Laser-Activated Surgical Adhesive on Cell Growth and Attachment. *Tissue Engineering and Regenerative Medicine International Society (TERMIS-AP2010), Sydney, Australia*. Abstracts.
50. Ahmed, T; Marcal, H; Shahbazi, J; Wanandy, N. & Foster, LJR. **2009** The Influence of Chitosan Scaffolds on Neural Progenitors and Mesenchymal Stem Cell Cycles. *Stem Cells at the Dome - Australian Stem Cell Conference, Canberra, Australia*. Abstracts 123.
51. Ahmed, T; Marcal, H; Wanandy, N; Lawless, M. & Foster, LJR. **2009** The Effects of Biomaterials on Stem Cell Growth. *Stem Cells at the Dome - Australian Stem Cell Conference, Canberra, Australia*. Abstracts.
52. Ho, S; Marcal, H; Shahbazi, J; Ahmed, T. & Foster, LJR. **2009** The Influence of Chitosan Deacetylation on C2C12 Satellite Stem Cells. *Stem Cells at the Dome - Australian Stem Cell Conference, Canberra, Australia*. Abstracts 125.
53. Shahbazi, J; Ho, S; Ahmed, T; Marcal, H; Wanandy, N. & Foster, LJR. **2009** Comparison of Mesenchymal Stem Cells and Ocular Fibroblasts Grown on Chitosan Scaffolds. *Stem Cells at the Dome - Australian Stem Cell Conference, Canberra, Australia*. Abstract 163.
54. Garvey, CJ; Russell, RA; Garamus, VM; Boue, F; Foster, LJR. & Holden, PJ. **2009** Small Angle Neutron Scattering Study of the Interface Between Ethylcellulose/ Polyhydroxybutyrate Blends during Annealing. *Small Angle Scattering SAS09, Oxford, UK*. Abstracts.
55. Blaber, E; Marcal, H; Foster, LJR. & Burns, B. **2009** 9th Australian Space Science Conference, Sydney, Australia, Abstracts.
56. Russell, RA; Holden, PJ; Appavou, M-S; Yun, A. & Foster, LJR. **2009** 'Biopolymer Deuteration for characterization by Small Angle Neutron Scattering'. *23rd Pacific Polymer Conference 7-11th Dec. Cairns, Australia*. Abstracts PPC2009-0793 (peer-reviewed)
57. Foster, LJR; Russell, RA; Sanguanchaipaiwong, V; Stone, DJM; Hook, JM. & Holden, PJ. **2009** 'Biosynthesis and Characterisation of Deuterated Polyhydroxyoctanoate (PHO)'. *23rd Pacific Polymer Conference 7-11th Dec. Cairns, Australia*. Abstracts PPC2009-0717 (peer-reviewed)
58. Woolnough, CA; Yee, LH; Charlton, T. & Foster, LJR. **2009** 'Surface Roughness Affects Biofouling and Environmental Degradation of 'Green' Plastics'. *23rd Pacific Polymer Conference 7-11th Dec. Cairns, Australia*. Abstracts PPC2009-0719 (peer-reviewed)
59. Foster, LJR. **2009** 'BioPEGylation of Polyhydroxyalkanoates for New Biomaterials'. *23rd Pacific Polymer Conference 7-11th Dec. Cairns, Australia*. Abstracts PPC2009-0718 (peer-reviewed)
60. Pollinger, G; Sanguanchaipaiwong, V; Hook, J. & Foster, LJR. **2009** 'BioPEGylation of Functionalised Polyhydroxyalkanoates'. *23rd Pacific Polymer Conference 7-11th Dec. Cairns, Australia*. Abstracts PPC2009-0777 (peer-reviewed)
61. Foster, LJR; Schwahn, D; Pipich, V; Holden, PJ. & Richter, D. **2009** 'Characterisation of BioPEGylated Polyhydroxyalkanoates using Small Angle Neutron Scattering (SANS)'. *23rd Pacific Polymer Conference 7-11th Dec. Cairns, Australia*. Abstracts PPC2009-0716 (peer-reviewed)

62. Chan, R; Garvey, C; Holden, PJ. & Foster, LJR. **2009** 'Polyhydroxybutyrate-Ethyl Cellulose Composites'. *23rd Pacific Polymer Conference 7-11th Dec. Cairns, Australia*. Abstracts PPC2009-0821 (*peer-reviewed*)
63. Wanandy, NS; Sleiman, RJ; Gray, PP. & Foster, LJR. **2008** Innovative Cell Lines that Resist Apoptosis for the Production of recombinant Protein for use in Tissue Engineered Strategies. *Tissue Engineering and Regenerative Medicine International Society North America Meeting (TERMIS), San Diego, USA*, Abstracts.
64. Russell, RA; Yun, SL; Holden, PJ. & Foster LJR. **2008** Chain Conformation of PHA Polymers in Solution. *7th AINSE/ANBUG Neutron Scattering Symposium AANSS08, Lucas Heights, Australia*, Abstracts: Talk2.7.21.
65. Foster, LJR; Schwahn, D; Pipich, V; Holden, PJ. & Richter, D. **2008** Characterisation of BioPEGylated Polyhydroxyalkanoates using Small Angle Neutron Scattering. *International Symposium on Bacterial Polyesters (ISBP-08) Auckland, New Zealand*, Abstracts.
66. Holden, PJ; Russell, RA; Garvey, CJ; Yun, SI. & Foster, LJR. **2008** Characterisation of Polyhydroxyalkanoates using Small Angle Neutron Scattering. *International Symposium on Bacterial Polyesters (ISBP-08) Auckland, New Zealand*, Abstracts.
67. Russell, RA; Garvey CJ; Holden, PJ; Garamus, VM. & Foster, LJR. **2008** Investigation of Biodegradable Polymer Blends. *International Symposium on Bacterial Polyesters (ISBP-08) Auckland, New Zealand*, Abstracts.
68. Russell, RA; Garvey CJ; Holden, PJ; Garamus, VM. & Foster, LJR. **2008** Investigation of Biodegradable Polymer Blends. *International Symposium on Bacterial Polyesters (ISBP-08) Auckland, New Zealand*, Abstracts.
69. Russell, RA; Yun, SI; Holden, PJ. & Foster, LJR. **2008** Chain Conformation of PHA Polymers in Solution. *International Symposium on Bacterial Polyesters (ISBP-08) Auckland, New Zealand*, Abstracts.
70. Foster, LJR; Marcal, H; Wananady, N. & Mahler, SM. **2008** 'BioPEGylation of Polyhydroxyalkanoates Promotes Satellite Stem Cell Cycling'. *Tissue Engineering and Regenerative Medicine International Symposium TERMIS08, 7-10th Dec. San Diego, USA*. Proceedings 533 (*peer-reviewed*)
71. Foster, LJR; Lauto, A; Marcal, H. & Stoodley, MD. **2008** 'Laser-Activated Surgical Bioadhesive for Sutureless Nerve Anastomosis'. *Tissue Engineering and Regenerative Medicine International Symposium TERMIS08, 7-10th Dec. San Diego, USA*. Proceedings 611 (*peer-reviewed*).
72. Marcal, H; Badylak, S; Lauto, A. & Foster, LJR. **2008** 'Combined Laser-Activated Surgical Bioadhesive and Decellularised Tissue Scaffolds for Enhanced Wound Repair and Tissue Regeneration'. *Tissue Engineering and Regenerative Medicine International Symposium TERMIS08, 7-10th Dec. San Diego, USA*. Proceedings 512 (*peer-reviewed*).
73. Marcal, H; Lauto, A; Badylak, SF; Sellaro, TL; Mackay-Sim, A; Mahler, S. & Foster, LJR. **2007** Laser-Activated Bioadhesive with Decellularized Tissue Scaffolds and Olfactory Ensheathing Cells May Enhance Repair and Regeneration of Injured Spinal Cords. *Laser Florence 2007, Florence, Italy*, Abstracts.
74. Foster, LJR, **2007** Application of Small Angle Neutron Scattering to Characterise Microbial Polyhydroxyalkanoates in Solution. *European Polymer Congress EPC, 2-6th July, Portoroz, Solvenia*, Abstracts.
75. Foster, LJR. **2007** BioPEGylation of Polyhydroxyalkanoates: Impact on Structure and Properties. *European Polymer Congress EPC, 2-6th July, Portoroz, Solvenia*, Abstracts.
76. Pippich, V; Foster, LJR. & Schwahn, D. **2007** SANS for the Characterisation of Polyhydroxyalkanoates in Solution. *4th European Conference on Neutron Scattering, Lund, Sweden*, Abstracts.

77. Holden, PJ; Ben-David, EA; Wilde, KL; Hammerton, KM; Stone, JM; Russell, RA. & Foster LJR. **2007** Evaluation of the Use of Microbial Measures to Characterise Impact of Acid Rock Drainage on Australian Rivers. *European Geosciences Union, Abstracts*.
78. Foster, LJR, **2007** 'Application of Small Angle Neutron scattering to Characterise Microbial Polyhydroxyalkanoates in Solution' *European Polymer Congress, 2-6th July, Portoroz, Solvenia*. Proceedings (*peer-reviewed*).
79. Foster, LJR. **2007** 'BioPEGylation of Polyhydroxyalkanoates: Impact on Structure and Properties.' *European Polymer Congress, 2-6th July, Portoroz, Solvenia*. Proceedings (*peer-reviewed*).
80. Foster, LJR; Pippich, V; Schwahn, D; Garvey, C. & Holden, PJ. **2006** SANS Characterisation of Polyhydroxyalkanoate Chains in Solution. *Annual AINSE Neutron Scattering Symposium, AANSS-06, Lucas Heights, Australia*, Abstracts.
81. Rodgers, LE; Knott, RB; Holden, PJ; Pike, KJ; Hanna, JV; Foster, LJR. & Bartlett, JR. **2006** Structure and Stability of Sol-gel Biocatalysts. *Annual AINSE Neutron Scattering Symposium, AANSS-06, Lucas Heights, Australia*, Abstracts.
82. Russell, RA; Holden, PJ; Sanguanchaipaiwong, V; Wilde, KL; Hammerton, KM. & Foster, LJR. **2006** Production and Use of Deuterated Polyhydroxyoctanoate in Structural Studies of PHO Inclusions. *7th International Symposium on BioPolymers, ISBP, Minneapolis, USA*, Proceedings, p.39
83. Woolnough, C; Yee, LH; Charlton, T. & Foster, LJR. **2006** 'Biofouling and Biodegradation of Bioplastics'. *International Symposium on Environmental Biotechnology- ISEB'06, Leipzig, Germany*. Abstracts.
84. Foster, LJR; Rodgers, LE & Holden, P.J. **2006** 'Culture of *Acidiphilium cryptum* BV1 with Halotolerant *Alicyclobacillus*-like spp.: Effects on Cell Growth and Iron Oxidation.' *International Symposium on Environmental Biotechnology- ISEB'06, Leipzig, Germany*. Abstracts.
85. Foster, LJR; Saufi, A. & Holden, PJ. **2006** 'Biopolymers as Bioindicators of Pollution'. *International Symposium on Environmental Biotechnology- ISEB'06, Leipzig, Germany*. Abstracts.
86. Woolnough, C; Yee, LH; Charlton, T. & Foster, LJR. **2006** Biofouling and Biodegradation of Bioplastics. *29th Australasian Polymer Symposium, Rotorua, New Zealand*. Abstracts H3/1.
87. Rodgers, LE; Knott, RB; Holden, PJ; Pike, PJ; Hanna, JV; Foster, LJR. & Bartlett, JR. **2005** Structural Evolution and Stability of Sol-gel Biocatalysts. *International Conference on Neutron Scattering 2005, Sydney, Australia*. Proceedings.
88. Russell, RA; Holden, PJ; Garvey, CJ; Wilde, KL; Hammerton, KM & Foster, LJR. **2005** Investigation of the Phase Morphology of Bacterial PHA Inclusion Bodies by Contrast Variation using SANS. *International Conference on Neutron Scattering 2005, Sydney, Australia*. Proceedings.
89. Foster, LJR; Knott, R; Sanguanchaipaiwong, S & Holden, PJ. **2005** Polyhydroxyalkanoate Based Natural-Synthetic Hybrid Polymer Films: a Small Angle Neutron Scattering Study. *International Conference on Neutron Scattering 2005, Sydney, Australia*. Proceedings.
90. Holden, PJ; Russell, RA; Garvey, CJ; Wilde, KL Hammerton, KM; Stone, DJM & Foster, LJR. **2005** Biodeuteration of Biopolymers: a Tool for Structural Investigation using Neutrons. *Jülich Soft Matter Days, Bonn, Germany*. Abstracts.
91. Foster, LJR; Knott, R; Sanguanchaipaiwong, V & Holden, PJ. **2005** Polyhydroxyalkanoate Based Natural-Synthetic Hybrid Polymer Films: a Small Angle Neutron Scattering Study. *Jülich Soft Matter Days, Bonn, Germany*. Abstracts.

92. Sanguanchaipaiwong, V; Gabelish, CL; Hook, J; Stenzel, M & Foster LJR. **2005** Biosynthesis and characterisation of a PHA-Based Natural-Synthetic Hybrid. *BioThailand 2005, Bangkok, Thailand*. Abstracts.
93. Holden, P.J., Russell, R.A., Garvey, C.J., Wilde, K.L., Hammerton, K.M., Stone, D.J. & L.J.R. Foster, **2005**. Biodeuteration of Biopolymers: a Tool for Structural Investigation using Neutrons. *Neutrons in Biology, Grenoble, France*, Proceedings, P-49.
94. Rodgers, L.E., Knott, R.B., Holden, P.J., Foster, L.J.R. & J.R. Bartlett, **2005**. Small Angle Neutron Scattering Studies on the Structural Evolution of Sol-Gel Biocatalysts. *13th International Workshop on Sol-gel Science and Technology, Los Angeles, USA*, Proceedings, P-159.
95. Lauto, A; Stoodley, M; Aviolo, A & Foster, LJR. **2005** Chitosan Adhesive for Laser Tissue Repair. *Laser Florence 2005, Florence, Italy*. Abstracts.
96. Holden, PJ; Russell, RA; Garvey CJ; Wilde, KL; Hammerton, KM; Stone, DJM & Foster, LJR. **2005** Biodeuteration of Biopolymers: a Tool for Structural Investigation using Neutrons. *ILL 2005*. Abstracts.
97. Albertin, L; Stenzel, M; Barner-Kowollik, C. Foster, LJR & Davis, TP **2004** Well-defined Glycopolymers from RAFT Polymerization: Poly(6-*O*-methacryloyl- α -D-methylglucoside) and its Block Copolymers with 2-Hydroxyethylmethacrylate and 2-*O*-methacryloxyethylglucoside. *MACRO 2004, Paris, France*. Proceedings 2.1.6.
98. Foster, LJR & Tighe, BJ. **2004** Hydrolytic Degradation of Centrifugally Gel-spun Polyhydroxybutyrate Fibres. *MACRO 2004, Paris, France*. Proceedings 5.3.5.
99. Foster, LJR; Sanguanchaipaiwong, V; Gabelish, C; Hook, J. & Scholz, C. **2004** Biosynthesis of Natural-Synthetic Hybrid Block Copolymers: mclPHA-DEG. *MACRO 2004, Paris, France*. Proceedings 4.3.4.
100. Foster, LJR; Yatim, R. & Poljak, A. **2004** Application of MALDI-TOF in the Rapid Characterisation of Biosurfactant produced from Palm Olein. *MACRO 2004, Paris, France*. Proceedings 3.2.4.
101. Holden, PJ; Russell, RA; Wilde, KL; Stone, DJ & Foster LJR. **2004** Growth of *Pseudomonas oleovorans* and Production of PHO in Deuterated Medium. *International Symposium on Bacterial Polyhydroxyalkanoates, Beijing, China*. Proceedings pg208.
102. Albertin, L; Allen, NK; Stenzel, M; Barner-Kowollik, C; Foster LJR. & Davis, TP. **2004** Well-defined Biomimetic Polymers from RAFT Polymerisation: Carbohydrate and Nucleoside Functionalised Poly(methacrylate)s. *Polymer Preprints (accepted)*.
103. Lauto, A; Foster, J; Avolio, A. & Poole-Warren, LA. **2004** Albumin-Genipin Solder For Laser Tissue-Welding. *7th World Biomaterials Congress, Sydney, Australia*. Proceedings 17-21.
104. Holden, PJ; Russell, RA; Stone, DJM; Garvey, CJ. & Foster, LJR. **2003** 'In vivo Deuteration of a Native Bacterial Biopolymer for Structural Elucidation Using SANS'. *3rd European Conference on Neutron Scattering, 3-6 Sept, Montpellier, France*, Proceedings 323 (peer-reviewed)
105. Rodgers, L.E., Holden, P.J., Foster, L.J.R., Knott, R.B., Finnie, K.S., and J.R.Bartlett, **2003** Effect of Sol-Gel Encapsulation on Enzyme Structure and Function: A Small Angle Neutron Scattering Study. *2003 Materials Research Society fall meeting, Boston, MA, USA*. Proceedings P 195.
106. Le, M; Ruys, D; Crosky, A. & Foster, J. **2003** Fabrication of Biodegradable Composites from Flax and Mater-Bi. *EcoComp 2003, London, UK*. Proceedings p30.
107. Rodgers, LE; Holden, PJ; Knott, RB; Finnie, KS; Bartlett, JB. & Foster, LJR. **2003** The Effect of Sol-Gel Encapsulation on Lipase Structure and Function and the Comparison of Resulting Materials using Small Angle Neutron Scattering. *Sol-Gel 2003 - XII International Workshop on Sol-Gel Science and Technology, Sydney, Australia*. Abstracts.

108. Pulsawat, W; Lesawasdi, N; Rogers, PL. & Foster, LJR. **2003** Anions Effects on Biosorption of MnII by Extracellular Polymeric Substances (EPS) from *Rhizobium etli*. *BioThailand 2003, Pattaya, Thailand*. Abstracts.
109. Sanguanchaipaiwong, V; Gabelish, C; Scholz, C. & Foster, LJR. **2003** The Novel Amphiphilic Natural-Synthetic Block Copolymers PHA-PEG. *BioThailand 2003, Pattaya, Thailand*. Abstracts.
110. Yatim, ARM. & Foster, LJR. **2003** MALDI-TOF-MS in the Bioprocess Control of Palm-Derived Biosurfactants. *International Palm Oil Conference PIPOC 2003, Putrajaya, Malaysia*. Abstracts.
111. Albertin, L; Kohlert, C; Heuts, H; Foster, LJR. & Davis, TP. **2003** Chemoenzymatic Synthesis of Carbohydrate-Functionalised Polymers with Controlled Architectures. *26th Australasian Polymer Symposium APS, Noosa, Australia*. Abstracts B3/6.
112. Albertin, L; Allen, NK; Foster, LJR. & Davis, TP. **2003** Enzymatic Syntheses of Polymerizable Vinyl Glucides. *26th Australasian Polymer Symposium APS, Noosa, Australia*. Abstracts PM41.
113. Foster, LJR; Holden, PJ; Garvey, CJ. & Russell, RA. **2003** Intracellular Organisation of Polyhydroxyalkanoate Inclusion Bodies: A role for Small Angle Neutron Scattering? *2nd AINSE Symposium on Small Angle Neutron Scattering and Reflectometry, Lucas Heights, Australia*. Abstracts.
114. Rodgers, LE; Holden, PJ; Knott, RB; Finnie, KS; Bartlett, JB. & Foster, LJR. **2003** Investigation of the Relationship between Structure and Function of Sol- Gel. *2nd AINSE Symposium on Small Angle Neutron Scattering and Reflectometry, Lucas Heights, Australia*. Abstracts.
115. Albertin, L; Kohlert, C; Foster, LJR. & Davis, TP. **2003** Chemoenzymatic synthesis of carbohydrate-functionalised polymers with controlled architectures. *Australian Colloid and Interface Symposium, Coogee, Australia*. Abstracts p32.
116. Lauto, A; Stewart, RB; Foster, J; Poppas, DP & Poole-Warren, L. **2003** Low Temperature Solder for Laser Tissue-Welding. *Australian Society for Biomaterials, Brisbane, Australia*. Proceedings
117. Foster, L.J.R. **2002** Optimising the Science Practical Experience. *Innovation in Teaching and Educational Technology Fellowship Symposium, Kensington, Australia*. Abstracts, 12.
118. Pulsawat, W; Rogers, PL. & Foster, LJR. **2002** Extracellular Polymeric Substances (EPS) from *Rhizobium etli* M4 and Heavy Metal Bioremediation. *1st Annual Symposium on Biotechnology and Biomolecular Sciences, Bondi, Australia*. Abstracts, P21.
119. Pulsawat, W; Foster, LJR. & Rogers, PL. **2002** Extracellular Polymeric Substances (EPS) from *Rhizobium etli* Strain M4 and its Application in Heavy Metal Bioremediation. *IBBS – 12th International Biodeterioration and Biodegradation Symposium, Prague, Czech Republic*. Abstracts, P02-05.
120. Holden, PJ; Ben-David, EA; Stone, DJM. & Foster, LJR. **2001** Phospholipid Fatty Acid Analysis of the Impact of Acid Drainage on Aquatic Sediment Microbiota. *Microbiology Australia, 22(4): A95*.
121. Holden, PJ; Ben-David, EA; Wilde, KL; Stone, DJM. & Foster, LJR. **2001** The Finiss River: A Natural Laboratory of Mining Impacts – Past, Present and Future. *The Finiss River Symposium, ANSTO, Sydney, Australia*. Proceedings E/748: 19-22.
122. Holden, PJ; Ben-David, EA; Stone, DJM. & Foster, LJR. **2001** Phospholipid Fatty Acid Analysis of the Impact of Acid Drainage on Aquatic Sediment Microbiota. *ASM Annual Scientific Meeting and Exhibition, Perth, Australia*. Abstracts, PP24.3.
123. Holden, PJ; Foster, LJR; Neilan, BA; Berra, G. & Vu, QM. **2001** Characterisation of Novel Salt Tolerant Iron-oxidising Bacteria. *International Biohydrometallurgy Symposium, Brazil*. Abstracts 45.

124. Foster, LJR; Handryani, S; Moy, YP; Widjita, NJ; Pulsawat, W. & Rogers, PL. **2000** Microbial Extracellular Polymeric Substances Produced During Heterotrophic Manganese Oxidation. *15th Australasian Biotechnology Conference, Brisbane, Australia*. Abstracts, 75.
125. Foster, LJR; Holden, PJ; Ben-David, EA. & Stone, DJM. **2000** Bacteria as Bioindicators of Pollution: Characterisation of the Impact of Acid mine drainage on Microflora using Phospholipid Fatty Acid Analysis. *15th Australasian Biotechnology Conference, Brisbane, Australia*. Proceedings, 47.
126. Holden, PJ; Ben-David, EA; Hammerton, KM; Stone, DM; Russell, RA; Wilde, KL. & Foster, LJR. **2000** Phospholipid Fatty Acid Analysis as a Measure of Impact of Acid Rock Drainage on Microbial Communities in Sediment and Comparison With Other Measures. *Proceedings of the 3rd Brukunga Workshop: Quantifying the Degree of Ecological Detriment in the Dawesly Creek/Bremer River System*. ANSTO C616:43-46.
127. Holden, PJ; Berra, G; Crane, AG; Foster, LJR; Neilan, BA. & Vu, QM. **1999** Characterisation of Novel Estuarine Iron-Oxidizing Bacteria that Leach Sediments and Minerals. *International Congress of Bacteriology & Applied Microbiology, Sydney, Australia*. Abstracts, BOS9.03:25.
128. Holden, PJ; Berra, G; Crane, AG; Foster, LJR; Neilan, BA. & Vu, QM. **1999** Evaluation of the Bioleaching Potential of Novel Marine Iron-oxidizing Bacteria. *Biomine'99: Biotechnology in Mining, Perth, Australia*. Abstracts 5-15.
129. Foster, LJR; Fuller RC. & Lenz, RW. **1998** Structure and Function of Polyhydroxyalkanoate Inclusion Bodies. *Abstracts Paper of the American Chemical Society* Vol:216 Part3: 184-POLY.
130. Foster, LJR; Stuart, ES; Fuller, RC. & Lenz, RW. **1998** Intracellular Depolymerase Functionality, Location and Integrity in Polyhydroxyoctanoate Inclusion bodies from *Pseudomonas oleovorans*. *Bio-Environmentally Degradable Polymer Symposium BEDPS-7th Annual Meeting, Boston, USA*. Abstracts No. PP10.
131. Foster, LJR; Stuart, ES; Fuller RC. & Lenz, RW. **1998** Structure and Function of Polyhydroxyalkanoate Inclusion Bodies. *ACS Annual Meetings, Polymer Preprints* 39(2): 100-101 (*peer-reviewed*)
132. Yasin, M. & Foster, LJR. **1995** Polyhydroxybutyrate-Hydroxyvalerate Based Blends: Biodegradation in Extreme Environments. *4th Annual Meeting of the Bio/Environmentally Degradable Polymer Society, New Hampshire, USA*. Abstracts P62.
133. Foster, LJR; Fuller, RC. & Lenz, RW. **1994** Intracellular Depolymerase of PHO Inclusion Bodies from *P. oleovorans*. *3rd Annual Meeting of the Bio/Environmentally Degradable Polymer Society, Cambridge, USA*. Abstracts O15.
134. Foster, LJR; Zervas, SJ; Fuller, RC. & Lenz, RW. **1994** Extracellular Depolymerase of *P. maculicola*. *3rd Annual Meeting of the Bio/Environmentally Degradable Polymer Society, Cambridge, USA*. Abstracts O10.
135. Foster, LJR; Timmins, M; Scherer, T; Fuller, RC. & Lenz, RW. **1994** Intra- and Extracellular Enzymatic Degradation of Bacterial Polyesters. *Abstracts Paper of the American Chemical Society* Vol:208 Part2: 241-POLY.
136. Yasin, M. & Foster, LJR. **1994** The Biodegradation of Polymer Blends in Extreme Environments. *Polymat '94, London, U.K.* Preprint Papers 162-165 (*peer-reviewed*)
137. Foster, LJR; Fuller, RC. & Lenz, RW. **1994** Aspects of Biopolymer Production and Degradation...Will it grow? Will it Degrade? *International Symposium on Bioproducts Processing, Kuala Lumpur, Malaysia*. Proceedings. 135-137.
138. Foster, LJR; Timmins, M; Scherer, T; Fuller, RC. & Lenz, RW. **1994** Intra- and Extracellular Enzymatic Degradation of Bacterial Polyesters. *Polymer Preprints* 35(2)5: 425-426 (*peer-reviewed*)

139. Foster, LJR. & Tighe, BJ. **1993** Gel-Spun PHB Wool. *2nd Annual Meeting of the Bio/Environmentally Degradable Polymer Society, Chicago, USA*. Abstracts 4.
140. Foster, LJR. & Tighe, BJ. **1992** The degradation of gel-spun polyhydroxybutyrate fibrous matrix in an accelerated degradation model. *Aspects of Contemporary Polymer Chemistry, Durham, U.K.* Abstracts 3.
141. Foster, LJR. & Tighe, BJ. **1990** The accelerated degradation of PHB(FM). *International Symposium on Bacterial Polyhydroxyalkanoates ISBP, Tokyo, Japan*. Abstracts P025.

Technical Reports

Over 30 confidential, technical reports while working for Bayer AG, Repartech Pty Ltd and as a consultant as well Expert Opinion as witness.