

Personal Details

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Current Positions

- Chair of Toxicology, University of Hertfordshire.
 - Chief Examiner, International Diploma of Toxicology, Royal Society of Biology.
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Academic Qualifications

- BSc (dual honours) Biochemistry and Physiology, University of Sheffield (1991).
 - MSc Toxicology, University of Birmingham (1992).
 - PhD, Imperial College London (1996-1999).
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Awards

- Winner of the Times Higher Education Award for STEM Research Project of the Year (2018).
 - Office of the Vice Chancellor Research Team of the Year Award (2018).
 - Joint recipient of the Best Practice award for the European Union's Health Programme (2012).
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Current Roles and Responsibilities

- Head of Toxicology Department within the Research Centre for Topical Drug Delivery and Toxicology.
 - Staff responsibilities: Up to 18 research staff in 4 research groups (forensics, *in vitro* toxicology, clinical trials and novel diagnostics), quality management team and 4 current PhD students.
 - Responsible for generating £10.5M of research and commercial income since 2012.
 - Current (annual) budgetary responsibility of ~£1.5M.
 - Director of a new departmental laboratory facility equipped with state-of-the-art analytical instruments, UKAS accredited to ISO17025.
 - Provision of emergency and strategic scientific counter-terrorist advice to several UK and US Government Departments.
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Professional Awards, Memberships and Achievements

- Fellow of the Royal Society of Chemistry (FRSC).
- Fellow of the Royal Society of Biology (FRSB).
- Chartered Biologist (CBiol).
- European Registered Toxicologist (ERT).
- Media spokesperson for the UK Register of Toxicologists (2015 – present).
- Chair of the UK Panel for the Registration of Toxicologists (2011 – 2015).
- Member of the UK Panel for the Registration of Toxicologists (2003 – 2011).
- Member of the Royal College of Pathologists Speciality Advisory Group on Toxicology (2014 – present)

Curriculum Vitae: Professor R.P. Chilcott, BSc(Hons), MSc, PhD, CBiol, FRSB, FRSC, ERT

- Member of the British Toxicology Society (1992 – present).
 - Secretary of the Education sub-committee for the British Toxicology Society (2008 – 2010).
 - Honorary member of the Graduate Board of Studies, University of Surrey (2007 – present).
 - Member of the International Society for Bioengineering and the Skin (1995 – 2010).
 - Honorary Senior Lecturer and external examiner for the School of Biomedical Sciences, University of Birmingham (1995 – 2013).
 - Member of the Examination Board (Division of Biochemical Sciences), University of Surrey.
 - External PhD examiner for the University of Wales Cardiff, University of Newcastle, University South Bank University (London), Université de Nice Sophia Antipolis, Cranfield University and Keele University.
 - Peer reviewer for a range of toxicology, biochemistry and physiology-related journals.
 - Lead researcher for collaborations involving laboratories in the UK, Australia, Canada, Czech Republic, Denmark, France, Germany, Japan, Portugal, South Africa and the USA.
 - Former assessor on the Committee of Toxicology of Chemicals in Food, Consumer Products and the Environment (COT).
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Government and International Committee Memberships

- Member of the EU Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) for Rapid Risk Assessment of Chemical Threats (2016 – present).
- Member, Government Decontamination Service Scientific Advisory Group (2013 – 2018).
- Subject Matter Expert, Home Office/Department of Health/Department of Communities and Local Government Programme Steering Board for “Initial Operational Response” (2010 – 2014) and “Strategic Operational Response” (2014 – 2016).
- Subject Matter Expert, Health Protection Agency/Public Health England/Department of Health/Cabinet Office Expert Group for CBRN Tri-Service e-learning Module (2012 – 2014).
- Subject Matter Expert, Home Office/Department of Health/Department of Communities and Local Government Programme Steering Board for “Immediate Operational Response” (2011 – 2014).
- Member, University of Hertfordshire School of Life Sciences Research Strategic Management Executive (2013 – 2017).
- Lead Scientist, DH Decontamination Task and Finish Group (2011 – 2016).
- Member, Home Office Multi-purpose personal protective equipment (M3P) technical board (2012 – 2013).
- Scientific Advisor, World Health Organisation Collaborating Centre for Public Health (2010 – 2012).
- Subject Matter Expert, Department of Health Hospital Decontamination Expert Group (2009 – 2011).
- Member, Department of Transport Very High Consequence Dangerous Goods Project Steering Board (2008 – 2011).
- Member of the Home Office CBRN Olympic Project Board (2008 – 2012).
- Member, Department of Health *ad hoc* working group on AEGL values (2006 – 2007).
- Member, Home Office CBRN Expert Group (2006 – 2011).
- Chair, HPA Trilateral (CBRN) Research Group (2006 – 2009).
- Member, Home Office Chemical Toxicology Working Group (2006 – 2008).
- Member, Department of Health CBRN R&D Group (2006 – 2011).
- Editorial board member for Toxbase, National Poisons Information Service (2005 – 2007).
- Secretary of Defence Science Advisory Council Working Group on Drug Delivery (2001 – 2002).

Previous Work Experience

- *Principal Toxicologist and Group Leader, Health Protection Agency, Porton Down (2005 – 2012)*
 - Line management responsibility for up to 11 members of staff.
 - Supervisor of up to eight PhD students.
 - Principle investigator of a £3.8M programme of laboratory and field trial (human volunteer) research.
 - Principal investigator of a £300k research programme to develop methods for assessing the dermal toxicity of nanoparticles in partnership with the University of Hertfordshire.
 - Provide toxicological advice on general toxicology, criminal poisoning and CBRN-related issues to Chief Medical Officer, Cabinet Office and Other Government Departments.
 - Provide policy recommendations / scientific advice to Department of Health, Home Office and Department of Communities and Local Government.
 - Involved in planning, implementation and co-ordination of national emergency responses for major chemical incidents.
 - Provision of advice and information on toxicological issues to health professionals and the general public.
 - Responding to public and media enquiries and the formulation of replies to Parliamentary questions.

- *Senior Toxicologist, Ministry of Defence, Porton Down (1992 – 2005)*
 - Dermal and general toxicity assessment of high priority chemicals and toxins.
 - Formulation and development of topical pharmaceuticals and medical devices.
 - Research and development of medical countermeasures against chemical warfare agents.
 - Project & resource management of multidisciplinary work programmes involving up to 25 members of staff.
 - Technical Focus Officer for Drug Delivery.
 - Providing scientific advice to HM Government and NATO countries.
 - Evaluation of emergency surgical procedures.
 - Supervision (mentoring, training and assessment) of students.

Books

1. **Chilcott RP**, Lerner J and Matar H (Editors), Primary Response Incident Scene Management: PRISM Guidance, Volumes 1-3, Second Edition, Office of the Assistant Secretary for Preparedness and Response, Biomedical Advanced Research and Development Authority (2018)
 2. **Chilcott RP** and Brain KR (Editors). "Advances in Dermatological Sciences", Royal Society of Chemistry, "Issues in Toxicology", series editors Anderson D, Marrs, TC, Waters MD and Wilks M (2013).
 3. **Chilcott, R.P.** and Price, S (Editors). "Principles and Practice of Skin Toxicology", John Wiley & Sons, Chichester (2008).
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Book Chapters

1. **Chilcott RP**, Lukey BJ, Slife HF, Clarkson ED, Hurst CG and Braue E. "Chemical warfare agent decontamination from skin" in "Chemical warfare agents: Biomedical and psychological effects, medical countermeasures and emergency response", Ed Lukey BJ, Romano JA and Salem H. Third Edition, Chapter 25, p549-558. CRC Press, Boca Raton (2019).
2. **Chilcott RP** and Wyke SM. "CBRN Incidents" in "Health Emergency Preparedness and Response", Ed. Sellwood C & Wapling A, Chapter 15, CABI (2016).
3. **Chilcott RP**. "Mitigating Dermal Exposure to Agrochemicals" in "Topical Drug Bioavailability, Bioequivalence and Penetration", 2nd Edition. Jenner J, Shah VP and Maibach HI (Eds). Springer Press. Chapter 3, (2015).
4. Shetage, SS, Traynor MJ, Brown MB and **Chilcott RP**. "Collection and characterisation of residual skin surface components obtained from sebum, sweat and epidermal lipids" in "Advances in Dermatological Sciences", Chapter 4, p26-36, Royal Society of Chemistry, "Issues in Toxicology", series editors Anderson D, Marrs, TC, Waters MD and Wilks M (2014).
5. **Chilcott RP**. "Section Editorial: Cosmeceuticals" in "Advances in Dermatological Sciences", Chapter 18, p225-227, Royal Society of Chemistry, "Issues in Toxicology", series editors Anderson D, Marrs, TC, Waters MD and Wilks M (2014).
6. **Chilcott RP**. "Section Editorial: Regulatory and Toxicology" in "Advances in Dermatological Sciences", Chapter 23, p283-286, Royal Society of Chemistry, "Issues in Toxicology", series editors Anderson D, Marrs, TC, Waters MD and Wilks M (2014).
7. Matar H, Price SC and **Chilcott RP**. Protective and temporal effects of clothing on the *in vitro* absorption of chemical warfare agents and simulants. In "Advances in Dermatological Sciences", Chapter 39, p435-440, Royal Society of Chemistry, "Issues in Toxicology", series editors Anderson D, Marrs, TC, Waters MD and Wilks M (2014).
8. **Chilcott RP**. "Modulation of sulphur mustard skin absorption by topical delivery of fatty acids and cholesterol" in "Advances in Dermatological Sciences", Ed Chilcott RP and Brain KR, Chapter 38, p428-434, Royal Society of Chemistry, "Issues in Toxicology", series editors Anderson D, Marrs, TC, Waters MD and Wilks M (2014).
9. Dalton CH, Graham SJ, Payne OJ, Chipman JK, **Chilcott RP** and Jenner J. "Influence of Receptor Media on GD Skin Penetration In Vitro in "Advances in Dermatological Sciences", Ed Chilcott RP and Brain KR, Chapter 32, p361-369, Royal Society of Chemistry, "Issues in Toxicology", series editors Anderson D, Marrs, TC, Waters MD and Wilks M (2014).
10. **Chilcott RP**. "Toxicity of Chemical Warfare Agents", in "Dermatotoxicology", Chapter 16, p144 – 149, 8th Edition, Ed. Zhai H, Wilhelm KP and Maibach HI, Informa Healthcare (2012).
11. **Chilcott RP**. "Initial Management of Mass Casualty Incidents", in "Disaster Management: Medical Preparedness, Response and Homeland Security". Chapter 17, pp 311 – 324. Ed. Arora R and Arora P. CABI Press, (2013).
12. **Chilcott, R.P.** "Dermal Toxicity of Mustard Gas", in "Toxicology of the Skin: Target Organ Toxicology Series", Chapter 27, Ed. Monteiro-Riviere, N.A. Informa Healthcare (2010).
13. **Chilcott, R.P.** "CBRN Contamination" in "Textbook of Environmental Medicine", Chapter 51. Ed. Ayres J, Harrison R, Nichols G, Maynard RL, eds. Hodder Arnold, London (2010).
14. Maynard, R.L. and **Chilcott, R.P.** "Toxicology of Chemical Warfare Agents", in "General and Applied Toxicology", Third Edition, Ed. Bryan Ballantyne, Timothy Marrs and Tore Syversen, Chapter 120, p2876 - 2911. Nature Publishing Group (2009).
15. **Chilcott, R.P.** "Cutaneous Anatomy and Histology", in "Principles and Practice of Skin Toxicology", Chapter 1, Ed. **Chilcott, R.P.** and Price, S. John Wiley & Sons, Chichester (2008).
16. Wakefield, J.C. and **Chilcott, R.P.** "In vivo measurements of percutaneous absorption", in "Principles and Practice of Skin Toxicology", Chapter 8, Ed. **Chilcott, R.P.** and Price, S. John Wiley & Sons, Chichester (2008).

17. Brain, K.R. and **Chilcott**, R.P. "Physicochemical factors influencing skin absorption". in "Principles and Practice of Skin Toxicology", Chapter 6, Ed. **Chilcott**, R.P. and Price, S. John Wiley & Sons, Chichester (2008).
18. Pugh, W.J. and **Chilcott**, R.P. "Principles of diffusion and thermodynamics", in "Principles and Practice of Skin Toxicology", Chapter 7, Ed. **Chilcott**, R.P. and Price, S. John Wiley & Sons, Chichester (2008).
19. **Chilcott**, R.P. "Dermal aspects of chemical warfare agents" in "Chemical Warfare Agents", Second Edition, Ed. Marrs TC, Maynard RL & Sidell FR. John Wiley & Sons, Chichester (2007).
20. **Chilcott**, R.P. and Rowland, C.A., "Reverse Electroporation of Glucose: A Preliminary Study", in "The Essential Stratum Corneum", Ed. R Marks, J-C Leveque and R Voegeli. Martin Dunitz, London, Chapter 47 pp303-313 (2002).
21. **Chilcott**, R.P., Dalton, C.H., Emanuel, A.J., Patel, A., Ashley, Z., Allen, C.E. and Bradley, S.T. "Basal TEWL rates and skin permeability", in "The Essential Stratum Corneum", Ed. R Marks, J-C Leveque and R Voegeli. Martin Dunitz, London, Chapter 44 pp267-274 (2002).
22. **Chilcott**, R.P., Patel, A., Ashley, Z., Hughes, J.N. and Parkes, J.A. "The effects of chemical damage on TEWL", in "The Essential Stratum Corneum", Ed. R Marks, J-C Leveque and R Voegeli. Martin Dunitz, London, Chapter 45 pp275-285 (2002).
23. **Chilcott**, R.P., Dalton, C.H., Emanuel, A.J., Allen, C.E. and Bradley, S.T. "The effects of physical damage on TEWL", in "The Essential Stratum Corneum", Ed. R Marks, J-C Leveque and R Voegeli. Martin Dunitz, London, Chapter 46 pp287-302 (2002).

Peer-Reviewed Journal Articles

1. Larner J, Durrant A, Hughes P, Mahalingam D, Rivers S, Matar H, Thomas E, Barrett M, Pinhal A, Amer N, Hall C, Jackson T, Catalani V, **Chilcott RP**. Efficacy of Different Hair and Skin Decontamination Strategies with Identification of Associated Hazards to First Responders. *Prehosp Emerg Care*. 2020 May-Jun;24(3):355-368. doi:10.1080/10903127.2019.1636912.
2. Matar H, Pinhal A, Amer N, Barrett M, Thomas E, Hughes P, Larner J, **Chilcott RP**. Decontamination and management of contaminated hair following a CBRN incident. *Toxicol Sci*. 2019 Jun 26;171(1):269-79. doi: 10.1093/toxsci/kfz145.
3. **Chilcott RP**, Larner J and Matar H. UK's Initial Operational Response and Specialist Operational Response to CBRN and HazMat Incidents: A Primer on Decontamination Protocols for Healthcare Professionals. *Emergency Medical Journal*, doi: 10.1136/emmermed-2018-207562.
4. Matar H, Amer N, Kansagra S, Pinhal A, Thomas E, Townend S, Larner J, **Chilcott RP**. Hybrid in vitro diffusion cell for simultaneous evaluation of hair and skin decontamination: temporal distribution of chemical contaminants. *Sci Rep*. 2018 Nov 15;8(1):16906. doi: 10.1038/s41598-018-35105-z.
5. Matar H, Price SC, **Chilcott RP**. Further studies of the efficacy of military, commercial and novel skin decontaminants against the chemical warfare agents sulphur Mustard, Soman and VX. *Toxicol In Vitro*. 2018 Oct 19;54:263-268. doi: 10.1016/j.tiv.2018.10.008 [Epub ahead of print].
6. **Chilcott RP**, Larner J, Durrant A, Hughes P, Mahalingham D, Rivers S, Thomas E, Amer N, Barrett M, Matar H, Pinhal A, Jackson T, McCarthy-Barnett K and Reppucci J. Evaluation of US Federal Guidelines (Primary Response Incident Scene Management [PRISM]) for Mass Decontamination of Casualties During the Initial Operational Response to a Chemical Incident. *Annals Emergency Medicine*. 2018 doi.org/10.1016/j.annemergmed.2018.06.042.
7. Shetage SS, Traynor MJ, Brown MB, **Chilcott RP**. Sebomic identification of sex- and ethnicity-specific variations in residual skin surface components (RSSC) for bio-monitoring or forensic applications. *Lipids Health Dis*. 2018 Aug 21;17(1):194. doi: 10.1186/s12944-018-0844-z.

8. **Chilcott RP**, Mitchell H, Matar H. Optimization of Non-ambulant Mass Casualty Decontamination Protocols as Part of an Initial or Specialist Operational Response to Chemical Incidents. *Prehosp Emerg Care*. 2018 May 30;1-12. doi: 10.1080/10903127.2018.1469705.
9. Hall CA, **Chilcott RP**. Eyeing up the Future of the Pupillary Light Reflex in Neurodiagnostics. *Diagnostics (Basel)*. 2018 Mar 13;8(1). pii: E19. doi: 10.3390/diagnostics8010019.
10. Catalani V, Prilutskaya M, Al-Imam A, Marrinan S, Elgharably Y, Zloh M, Martinotti G, Chilcott RP, Corazza O. Octodrine: New Questions and Challenges in Sport Supplements. *Brain Sci*. 2018 Feb 20;8(2). pii: E34. doi: 10.3390/brainsci8020034.
11. Lydon H, Hall C, Matar H, Dalton C, Chipman JK, Graham JS, **Chilcott RP**. The percutaneous toxicokinetics of VX in a damaged skin porcine model and the evaluation of WoundStat™ as a topical decontaminant. *J Appl Toxicol*. 2017 Oct 10. doi: 10.1002/jat.3542.
12. Dalton C, Hall C, Lydon H, Jenner J, Chipman JK, Graham JS, **Chilcott RP**. The percutaneous absorption of soman in a damaged skin porcine model and the evaluation of WoundStat™ as a topical decontaminant. *Cutan Ocul Toxicol*. 2017 Aug 30;1-8. doi:10.1080/15569527.2017.1365883.
13. Shetage SS, Traynor MJ, Brown MB, Galliford TM, **Chilcott RP**. Application of sebomics for the analysis of residual skin surface components to detect potential biomarkers of type-1 diabetes mellitus. *Sci Rep*. 2017 Aug 21;7(1):8999. doi: 10.1038/s41598-017-09014-6.
14. Amlôt R, Carter H, Riddle L, Larner J, **Chilcott RP**. Volunteer trials of a novel improvised dry decontamination protocol for use during mass casualty incidents as part of the UK'S Initial Operational Response (IOR). *PLoS One*. 2017 Jun 16;12(6): e0179309. doi:10.1371/journal.pone.0179309.
15. Marrinan S, Roman-Urrestarazu A, Naughton D, Levari E, Collins J, **Chilcott RP**, Bersani G, Corazza O. Hair analysis for the detection of drug use-is there potential for evasion? *Hum Psychopharmacol*. 2017 May;32(3). doi: 10.1002/hup.2587. Epub 2017 May 31.
16. Hall CA, Lydon HL, Dalton CH, Chipman JK, Graham JS, **Chilcott RP**. The percutaneous toxicokinetics of Sulphur mustard in a damaged skin porcine model and the evaluation of WoundStat™ as a topical decontaminant. *J Appl Toxicol*. 2017 Sep;37(9):1036-1045. doi: 10.1002/jat.3453. Epub 2017 Mar 17.
17. Kassouf N, Syed S, Larner J and **Chilcott RP**. In vitro evaluation of absorbent materials as *ad hoc* dry decontaminations for mass casualty incidents. *PLOS1* (2017) doi: 10.1371/journal.pone.0170966.
18. Lydon HL, Hall CA, Dalton CH, Chipman JK, Graham JS and **Chilcott RP**. Development of haemostatic decontaminants for treatment of wounds contaminated with chemical warfare agents. 3: Evaluation of in vitro topical decontamination efficacy using damaged skin. Prepared for submission to *Journal of Applied Toxicology* (2017) DOI:10.1002/jat.3446.
19. Matar H, Larner J, Viegas V, Kansagra S, Atkinson KL, Shetage S, Skamarauskas JT, Theivendran B, Goldman VS, **Chilcott RP**. Evaluation of a new topical skin protectant (RD1433) for the prevention and treatment of incontinence-associated dermatitis. *Cutan Ocul Toxicol* (2016), 23:1-9, DOI 10.1080/15569527.2016.1257637.
20. Al-Imam, A., Santacroce, R., Roman-Urrestarazu, A., **Chilcott, R.**, Martinotti, G., Bersani, G. & Corazza, O. Captagon: use and trade in the middle east. *Human Psychopharmacology: Human and Experimental*, (2016), DOI: 10.1002/hup.2548.
21. Power SJ, Symons C, Carter H, Amlôt R, Matar H, Larner J and **Chilcott RP**. Mass casualty decontamination in the United States: An online survey of current practice. *Health Security* **14** 1-11 (2016). DOI: 10.1089/hs.2016.0047.
22. Matar H, Guerriero A, Piletsky SA, Price SC, and **Chilcott RP**. Preliminary evaluation of military, commercial and novel skin decontamination products against a chemical warfare agent simulant (methyl salicylate). *Cutaneous and Ocular Toxicology* (2015). DOI:10.3109/15569527.2015.1072544.

23. Amlôt R, Wakefield J, Riddle L and **Chilcott RP**. Minimum Practical Showering Duration for Mass Casualty Decontamination. *Emergency Medical Journal* (2017; *in press*).
24. Larner J, Matar H, Goldman VS and **Chilcott RP**. Development of a cumulative irritation model for incontinence-associated dermatitis. *Archives of Dermatological Research*, 307(1):39 – 48. DOI 10.1007/s00403-014-1526-y (2015).
25. **Chilcott RP**, Larner J, Matar H, Kansagra S, Theivendran B, Viegas V and Goldman VS. Optimisation of a dosing regime for a topical skin protectant (barrier cream). *Journal of Cutaneous and Ocular Toxicology* 19:1-8 (2015). DOI:10.3109/15569527.2014.994124.
26. Dalton CH, Hall CA, Lydon HL, Chipman JK, Graham JS and **Chilcott RP**. Development of haemostatic decontaminants for the treatment of wounds contaminated with chemical warfare agents. 2: Evaluation of in vitro topical decontamination efficacy using undamaged skin. *Journal of Applied Toxicology* DOI 10.1002/jat.3060 (2014).
27. Hall CA, Lydon HL, Dalton CH, Chipman JK, Graham JS and **Chilcott RP**. Development of haemostatic decontaminants for the treatment of wounds contaminated with chemical warfare agents. 1: Evaluation of in vitro clotting efficacy in the presence of certain contaminants. *Journal of Applied Toxicology*, 10.1002/jat.3019 (2014).
28. Duarte-Davidson R, Orford R, Wyke SA, Griffiths M, Amlôt RA and **Chilcott RP**. Recent advances to address European Union Health Security from cross border chemical health threats. *Environment International*, DOI 0.1016/j.envint.2014.01.003 (2014; *in press*).
29. **Chilcott RP**. Managing Mass Casualties and Decontamination. *Environment International*, 2014 Nov;72:37-45. doi: 10.1016/j.envint.2014.02.006.
30. Matar H, Larner J, Kansagra S, Atkinson KL, Skamarauskas JT, Amlôt R and **Chilcott RP**. Design and characterisation of a novel *in vitro* skin diffusion cell system for assessing mass casualty decontamination systems. *In Vitro Toxicology* 28(4), pp 492–501, DOI:10.1016/j.tiv.2014.01.001 (2014).
31. Shetage SS, Traynor MJ, Brown MB, Graham-Kalio D and **Chilcott RP**. Effect of Ethnicity, Gender and Age on the Amount and Composition of Residual Skin Surface Components Derived from Sebum, Sweat and Epidermal Lipids. *Skin Research Technology*, Feb;20(1):97-107 (2014).
32. Misik J, Pavlik M, Novotny L, Pavlikova R, **Chilcott RP**, Cabal J, Kuca K. In vivo decontamination of the nerve agent VX using the domestic swine model. *Clin Toxicol (Phila)*, 50(9), p807-11 (2012).
33. Karasová JZ, Hnídková D, Pohanka M, Musílek K, **Chilcott RP** and Kuča K. Pharmacokinetics of acetylcholinesterase reactivator K203 and consequent evaluation of low molecular weight antioxidants/markers of oxidative stress. *J Applied Biomedicine*, 10, p71–78 (2012).
34. Staff K, Brown MB, **Chilcott RP**, Hider RC, Jones SA, Kong XL. Ga(III) complexes--the effect of metal coordination on potential systemic absorption after topical exposure. *Toxicol Lett.* 202, p155-60 (2011).
35. Clarkson ED, Smith KH, Hall CA, Lydon HL, Dalton CH, Graham JS, Railer RF, Stevenson RS, Deckert RR, Devorak JL, Boecker JD, Braue EH, Lumpkin HL, Doxzon BF and Chilcott RP "Testing the Ability of WoundStat™ to Protect against the Chemical Warfare Agent VX". *The Toxicologist*, 120(2): 433 (2011) [Abstract].
36. Amlôt R, Larner J, Matar H, Jones DR, Carter H, Turner EA, Price SC and **Chilcott RP**. Comparative Analysis of Showering Protocols for Mass Casualty Decontamination. *Prehospital and Disaster Medicine*, 25(5), p437 – 441 (2010).
37. Matar H, Price SC and **Chilcott RP**. Temporal effects of disrobing on the skin absorption of chemical warfare agents and CW agent simulants. *Toxicology* 278(3), p344 – 345 (2010). [Abstract].
38. Larner J, Matar H, Jones DR, Amlôt R, Carter H, Turner EA, Price SC and **Chilcott RP**. Whole-body imaging of UV-fluorescent chemical warfare simulants: A potentially quantitative

- technique for the optimisation of mass casualty decontamination procedures. [Abstract] *Toxicology*, 262(1), p17 (2009).
39. Hall CA, Lydon HL, Dalton CH Chipman JK, **Chilcott RP** and Graham JS. The in vitro efficacy of haemostatic products in the presence of chemical warfare agents—Sulphur mustard (HD) and VX. [Abstract] *Toxicology* 262(1), p9-10 (2009).
 40. Hattersley IJ, Jenner J, Dalton CH, **Chilcott RP** and Graham JS. The skin reservoir of sulphur mustard. *Toxicology In Vitro*. 22(6) 1539 – 46 (2008).
 41. Clarke SFJ, **Chilcott RP**, Wilson JC, Kamanyire R, Baker DJ and Hallett A. Decontamination of multiple casualties who are chemically contaminated: A challenge for acute hospitals. *Prehospital and Disaster Medicine*. 23(2) 175 – 181 (2008).
 42. **Chilcott**, R.P., Jenner, J., Dalton, C.H., Ashley, Z., Allen, C. and Bradley, S. “Evaluation of barrier creams against sulphur mustard: (2) *In Vitro* and *In Vivo* studies using pig skin”. *Journal of Cutaneous and Ocular Toxicology*, 26 235 – 247 (2007).
 43. Dalton CH, Hattersley IJ, Rutter SJ and **Chilcott RP**. Absorption of the nerve agent VX (O-ethyl-S-[2(di-isopropylamino)ethyl]methyl phosphonothionate) through pig, human and guinea pig skin *in vitro*. *Toxicology In vitro* 20 1532 – 1536 (2006).
 44. Dalton CH, Maidment MP, Jenner J and **Chilcott RP**. “Closed cup vapour systems in percutaneous exposure studies: what is the dose?” *J Anal Toxicol* 30 165 – 170 (2006).
 45. **Chilcott RP**, Dalton CH, Hattersley IJ, Rutter SJ and Graham JS. Infrared imaging for the non-invasive assessment of chemical burns: A preliminary study. *Toxicology* 219 230 – 240 (2006).
 46. **Chilcott** RP, Dalton CH, Hill I, Davison CM, Blohm KL, Clarkson ED and Hamilton MG. “Evaluation of a barrier cream against the chemical warfare agent VX using the domestic white pig.” *Basic & Clinical Pharmacology and Toxicology*, 97 35 – 38 (2005).
 47. **Chilcott** RP. “Toxicity of Sulphur Mustard (Letter to the Editor).” *Toxicol Appl Pharmacol* 204(1) 99 – 100 (2005).
 48. Graham JS, **Chilcott** RP, Rice P, Maliner BI and Hurst CG. Wound Healing of Cutaneous Sulfur Mustard Injuries: Strategies for the Development of Improved Therapies. *Journal of Burns and Wounds* 4(1) 1-59 (2004).
 49. **Chilcott** RP, Barai N, Beezer AE, Brain SI, Brown MB, Bunge AL, Burgess SE, Cross S, Dalton CH, Dias M, Farinha A, Finnin BC, Gallagher SJ, Green DM, Gunt H, Gwyther RL, Heard CM, Jarvis CA, Kamiyama F, Kasting GB, Ley EE, Lim ST, McNaughton GS, Morris A, Nazemi MH, Pellett MA, du Plessis J, Quan YS, Raghavan SL, Roberts M, Romonchuk W, Roper CS, Schenk D, Simonsen L, Simpson A, Traversa BD, Trottet L, Watkinson A, Wilkinson SC, Williams FM, Yamamoto A and Hadgraft J. “Inter- and intra-laboratory variation of *in vitro* diffusion cell measurements: An international multi-centre study using quasi-standardised methods and materials”. *Journal of Pharmaceutical Sciences*, 94(3) 632 – 638 (2004).
 50. **Chilcott**, R.P., Dalton, C.H., Hill, I., Davison, C.M., Blohm, K.L., Clarkson, E.D. and Hamilton, M.G. “In vivo skin absorption and distribution of the nerve agent VX (O-ethyl-S-[2(diisopropylamino)ethyl] methylphosphonothioate) in the domestic white pig”. *Human and Experimental Toxicology* 24 347 – 352 (2005).
 51. **Chilcott**, R.P., Dalton, C.H., Hill, I., Davison, C.M., Blohm, K.L. and Hamilton, M.G. “Clinical Manifestations of VX poisoning following percutaneous exposure in the domestic pig”. *Human and Experimental Toxicology* 22 255 – 261 (2003).
 52. **Chilcott**, R.P., Dalton, C.H., Emanuel, A.J., Allen, C. and Bradley, S.,. “Transepidermal water loss (TEWL) does not correlate with skin barrier function *in vitro*”. *Journal of Investigative Dermatology*, 188(5) 871 – 875 (2002).
 53. Allen, C.E., Bradley, S.T. and **Chilcott**, R.P. “Four Legs Good: A Review of Pig Behaviour”. *Pig Journal* 49 7-51 (2002).
 54. **Chilcott**, R.P., Jenner, J., Hotchkiss, S.A.M. and Rice, P. “Evaluation of barrier creams against sulphur mustard: (I) *In vitro* studies using human skin”, *Skin Pharmacology and Applied Physiology*, 15(4) 225-235 (2002).

55. Dalton, C.H. and **Chilcott**, R.P. "Exposure to UVB Radiation Does not Directly Impair Skin Barrier Function.", *Toxicology* **168** pp136 (2001).
 56. **Chilcott**, R.P., Stubbs, B. and Ashley, Z., 2001. "Habituating pigs for in-pen, non-invasive biophysical skin analysis", *Laboratory Animals* **35** 230-235.
 57. **Chilcott**, R.P., Jenner, J., Hotchkiss, S.A.M. and Rice, P., 2001. "*In Vitro* Skin Absorption and Decontamination of Sulphur Mustard: Comparison of Human and Pig-Ear Skin", *Journal of Applied Toxicology*, **21** 279-283.
 58. Guo XX, Ciortea LI, **Chilcott** RP, Imhof RE and Xiao P. Opto-thermal measurement of barrier cream residence time on skin in-vivo. *Anal Sci* **17** S346-348 (2001).
 59. Rice, P., Brown, R.F.R., Lam, D.G.K., **Chilcott**, R.P. and Bennett, N.J., 2000, "Dermabrasion - A Novel Concept in the Surgical Management of Sulphur Mustard Injuries", *Burns* **26** 34-40.
 60. **Chilcott**, R.P., Jenner, J., Carrick, W., Hotchkiss, S.A.M. and Rice, P., 2000. "*In vitro* human skin absorption of bis-2-(chloroethyl)sulphide (sulphur mustard)", *Journal of Applied Toxicology*, **20** 349-355.
 61. Rowland, C.A. and **Chilcott**, R.P., 2000. "The Electrostaticity and Electrically Assisted Delivery of an Organophosphate Pretreatment (Physostigmine) Across Human Skin *In Vitro*", *Journal of Controlled Release* **68** 157-166.
 62. **Chilcott**, R.P. and Farrar, R., 2000. "Biophysical Measurements of Human Forearm Skin *In Vivo*: Effects of Site, Gender, Chirality and Time", *Skin Research and Technology*, **6** 64-69.
 63. **Chilcott**, R.P., Brown, R.F.R. and Rice, P., 2000. "Non-Invasive Quantification of Skin Injury Resulting from Exposure to Sulphur Mustard and Lewisite Vapours", *Burns*, **26** 245-250.
 64. Rowland, C.A. and **Chilcott**, R.P., 1999. "The Electrostaticity and Electrically-Assisted Delivery of an Organophosphate Pre-treatment (Physostigmine) Across Human Skin *In Vitro*", *Human and Experimental Toxicology* **19** p760.
 65. Ashley, Z., Rowland, C.A. and **Chilcott**, R.P., 1999. "Non-Invasive Evaluation of Skin Lesions Induced by Exposure to a Toxic Chemical Vapour", *Human and Experimental Toxicology*, **19** p758.
 66. **Chilcott**, R P and Jenner, J, 1995. "Measurement of the kinetic parameters of sulphur mustard penetration through human and porcine epidermal membranes *in vitro*", *Human and Experimental Toxicology*, **14** p773.
 67. **Chilcott**, R.P. Jenner, J., Taylor C. and Rice, P. 1995. "A Rapid technique to identify structurally non-viable epidermal membranes during percutaneous penetration studies", *Human and Experimental Toxicology*, **15** p161.
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Conference Proceedings and Posters

1. Shetage SS, Brown MB, Traynor MJ and **Chilcott RP**. Sebomic analysis of residual skin surface components for identifying Type 1 diabetes mellitus. Proceedings of the Perspectives in Percutaneous Penetration XV Conference, France, March (2016).
2. Larner J, Matar H, Amlôt RA and **Chilcott RP**. Evaluation of the ladder pipe system for mass casualty decontamination (2): Human volunteer studies. Proceedings of the Perspectives in Percutaneous Penetration XV Conference, France, March (2016).
3. Matar H, Larner J, Atkinson KL, Kansagra S, Townend S and **Chilcott RP**. Evaluation of the ladder pipe system for mass casualty decontamination (1): in vitro studies of shower hydrodynamics using chemical warfare agents. Proceedings of the Perspectives in Percutaneous Penetration XV Conference, France, March (2016).
4. Matar H, Larner J, Atkinson KL, Kansagra S, Townend S, Amlôt R and **Chilcott RP**. Overview and evaluation of the ladder pipe decontamination system. Proceedings of the Perspectives in Percutaneous Penetration XV Conference, France, March (2016).

5. Atkinson K, Kansagra S, Matar H, Larner J and **Chilcott RP**. Effects of Shower Hydrodynamics on Decontamination of Chemical Warfare Agent Simulants. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
6. **Chilcott RP**. History of Decontamination Research. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
7. Matar H, Larner J, Kansagra S, Atkinson K and **Chilcott RP**. Design and characterisation of a novel in vitro skin diffusion cell system for assessing mass casualty decontamination systems. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
8. Matar H, Guerriero A, Piletsky SA, Price SC and **Chilcott RP**. Preliminary evaluation of military, commercial and novel skin decontamination products against chemical warfare agents. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
9. Shetage S, Traynor MJ, Brown MB and **Chilcott RP**. HPLC-APCI-MS profiling of residual skin surface components: 'Sebomics'. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
10. Larner J, Matar H, Cavell B, Symons C, Bredbere S, Amlôt R and **Chilcott RP**. Use of LC-MS urinalysis to measure systemic exposure to methyl salicylate CW simulant in a human volunteer decontamination trial. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
11. Viegas VA, Goldman VS and **Chilcott RP**. In Vitro Efficacy Of A Topical Skin Protectant Using Flexed Skin. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
12. Kansagra S, Atkinson K, Matar H, Larner J and **Chilcott RP**. Effects of Shower Delays on Decontamination of Chemical Warfare Agent Simulants. Abstract: CBRN Research & Innovation Conference, Antibes, France, April 2015.
13. Larner J, Matar H, Goldman VS and **Chilcott RP**. "Development of a new topical treatment for incontinence-associated dermatitis (IAD): optimisation of dosing regime". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
14. Larner J, Matar H, Goldman VS and **Chilcott RP**. "Development of a chronic irritation model for incontinence-associated dermatitis (IAD)". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
15. Matar H, Larner J, Goldman VS and Chilcott RP. "Evaluation of a new topical skin protectant (RD1433) for the prevention and treatment of Incontinence-associated dermatitis". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
16. Matar H, Larner J, Kansagra S, Atkinson KL, Skamarauskas JT and **Chilcott RP**. "Design and characterisation of a novel in vitro skin diffusion cell system for assessing mass casualty decontamination systems". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
17. Atkinson KL, Kansagra S, Matar H, Larner J and **Chilcott RP**. "Effects of shower hydrodynamics on decontamination of a chemical warfare agent simulant (14C-Methylsalicylate)". Conference Proceedings XIV: Perspectives in Percutaneous Penetration, Volume 14, Grand Motte, France, April (2014).
18. Kansagra S, Matar H, Larner J, Atkinson KL, Skamarauskas JT and **Chilcott RP**. "Effect of shower hydrodynamics on the decontamination of chemical and biological warfare agent simulants". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
19. Larner J, Esposito M, Wells K and **Chilcott RP**. "Localisation and quantification of percutaneous penetration by autoradiography: a new approach". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).

20. Shetage SS, Brown MB, Traynor MJ and **Chilcott RP**. "Quantitative and qualitative evaluation of residual skin surface components: sebomics". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
21. Kassouf N, Larner J and **Chilcott RP**. "Evaluation of non-proprietary absorbent materials for skin decontamination: comparison of two *in vitro* assays". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
22. Viegas VA, Wakefield JC, Traynor MJ, Brown MB and **Chilcott RP**. "Characterisation of a new model for assessing dermal exposure to nanoparticles (Cutaflex): studies with model compounds". Conference Proceedings: Perspectives in Percutaneous Penetration XIV, Volume 14, Grand Motte, France, April (2014).
23. Larner J, Matar, H, Goldman VS and **Chilcott RP**. "Development of a Clinical Model for Incontinence-Associated Dermatitis". Poster presented at the Symposium of Advanced Wound Care, Denver, Colorado (2013).
24. Viegas, V.A., Traynor, M.J., Wakefield, J.C., Brown, M.B. and **Chilcott, R.P.** "Development of a novel *in vitro* flexing diffusion cell (CutaFlex™) for investigation of skin barrier function and nanoparticle penetration", Skin Forum Annual Meeting, London (2013).
25. Viegas, V.A., Traynor, M.J., Wakefield, J.C., Brown, M.B. and **Chilcott, R.P.** "Development of an *in vitro* tissue exposure model for nanotoxicity assessment", Aerosol Society Annual Conference, Hatfield (2013).
26. Viegas VA, Wakefield JC, Traynor MJ, Brown MB and **Chilcott RP**. Characterisation of a novel *in vitro* flexing diffusion cell (CutaFlex™): Testing skin barrier integrity using tritiated water penetration and transepidermal water loss (TEWL). Abstract presented at British Toxicology Society Annual Conference (2013).
27. Viegas VA, Wakefield JC, Traynor MJ, Brown MB and **Chilcott RP**. Investigation of quantum dot nanoparticle penetration using a novel flexing diffusion cell (CutaFlex™). Abstract presented at British Toxicology Society Annual Conference (2013).
28. Dalton CH, Payne OJ, Graham SJ, **Chilcott RP** and Jenner J. "The skin reservoir of the nerve agent soman (GD) *in vitro*" Poster presented at Stratum Corneum VII, Cardiff, UK (September 2012).
29. Smith KH, Hall CA, Lydon HL, Dalton CH, Graham JS, Railer RF, Stevenson RS, Deckert RR, Devorak JL, Boecker JD, Braue EH, Lumpkin HL, Doxzon BF, **Chilcott RP** and Clarkson ED "Testing the Ability of Haemostatic Products to Protect Against the Chemical Warfare Agent VX", Poster presented at the 18th Biennial Medical Chemical Defense Bioscience Review, Maryland, USA (May 2012).
30. Dalton CH, Payne O, Graham S, Chipman JK, **Chilcott RP** and Jenner J. Influence of receptor media on GD skin penetration *in vitro*. Abstracts of Presentations at the Perspectives in Percutaneous Penetration Conference, Volume 13, p97 (2012).
31. Shetage SS, Brown MB, **Chilcott RP** and Traynor MJ. Effect of ethnicity and gender on residual skin surface components", Abstracts of Presentations at the Perspectives in Percutaneous Penetration Conference, Volume 13, p87 (2012).
32. Matar H, Price SC and **Chilcott RP**. Temporal effects of disrobing on the skin absorption of chemical warfare agents and simulants. Abstracts of Presentations at the Perspectives in Percutaneous Penetration Conference, Volume 12, p115 (2010).
33. Larner J, Jones DR, Price SC and **Chilcott RP**. Modified static diffusion cells for decontamination modelling. Abstracts of Presentations at the Perspectives in Percutaneous Penetration Conference, Volume 12, p116 (2010).
34. Jones DR, Larner J, Price SC and **Chilcott RP**. Optimisation of mass casualty decontamination procedures *in vitro*. Abstracts of Presentations at the Perspectives in Percutaneous Penetration Conference, Volume 12, p120 (2010).

35. Dalton CH, Hall CA, Lydon HL, Chipman JK, **Chilcott RP** and Graham JS. Absorption of GD through damaged and undamaged pig skin in vitro. Abstracts of Presentations at the Perspectives in Percutaneous Penetration Conference, Volume 12, p121 (2010).
36. Hall, CA, Lydon, HL, Dalton, CH, Chipman, JK, **Chilcott, RP** and Graham, JS. The In Vitro Efficacy of Haemostatic Products in the Presence of Chemical Warfare Agents - Sulphur Mustard (HD) and VX. Proceedings of the British Toxicology Society Meeting (March 2009).
37. Larner, J, Matar, H, Jones, DR, Amlôt, R, Carter, H, Turner, EA, Price, SC and **Chilcott, RP**. Whole-Body Imaging Of UV-Fluorescent Chemical Warfare Simulants: A Potentially Quantitative Technique For The Optimisation of Mass Casualty Decontamination Procedures. Proceedings of the British Toxicology Society Meeting (March 2009).
38. Wakefield JC, Kuar KK and **Chilcott RP**. Sebum As A Biomatrix For Monitoring Exposure To Environmental Chemicals Following An Accidental Or Deliberate Release. Perspectives in Percutaneous Penetration Conference, Grande Motte, France (March 2008).
39. **Chilcott RP**, Dalton CH, Hattersley IJ, Rutter SJ and Graham JS. Infrared imaging for the non-invasive assessment of chemical burns: A preliminary study. Poster presented at Gordon Conference, Massachusetts (August 2005).
40. **Chilcott RP**. Letter to Santa. Poster presented at the International Society for Bioengineering and the Skin, Orlando, Florida (October 2004).
41. Packham, H.E., **Chilcott, R.P.**, Dalton, C.H., Stevens, A and Weston, N. "Traceable calibration for TEWL: does it make a difference in practice?" Poster presented at the International Society for Bioengineering and the Skin, Orlando, Florida (October 2004).
42. Dalton, C.H., Hattersley, I.J., Rutter, S.J. and **Chilcott, R.P.** "Skin absorption of VX in vitro" Poster presented at Occupational and Environmental Exposures of Skin to Chemicals, Stockholm (June 2005).
43. Dalton, C.H., **Chilcott, R.P.** and Hattersley, I.J. "TEWL is influenced by choice of measurement device" Poster presented at the Stratum Corneum IV meeting, Paris, France (June 2004).
44. Imhof, R.E., Dalton, C.H., **Chilcott R.P.** et al "Towards a traceable calibration for trans-epidermal water loss" Poster presented at the Stratum Corneum IV meeting, Paris, France (June 2004).
45. Dalton, C.H., **Chilcott, R.P.** and Jenner, J. "Implications of a putative HD skin depot in cutaneous therapeutics" In "Biosciences Review 2004: Medical Chemical Defense Research for the Warfighter and Homeland Defense" (May 2004).
46. Dalton, C.H., Rutter, S.J., Brady, S.M., Hattersley, I.J and **Chilcott, R.P.** "In vitro skin absorption of a series of homologous alcohols: Effect of receptor chamber fluid composition and receptor chamber area." Poster presented at Perspectives in Percutaneous Penetration, Montpellier, France (April 2004).
47. Hattersley, I.J., Dalton, C.H. and **Chilcott, R.P.** "In vitro skin absorption of benzene: effects of receptor chamber fluid composition and occlusion" Poster presented at Perspectives in Percutaneous Penetration, Montpellier, France (April 2004).
48. Dalton, C.H., Hattersley, I.J., **Chilcott, R.P.** "TEWL measurement: a comparison of five commercially available devices". Poster presented at the Skin Forum meeting, Newcastle, UK (July 2003).
49. **Chilcott, R.P.**, Dalton, C.H. et al. "Inter- and intra-laboratory variation of in vitro diffusion cell measurements: An international multi-centre study using quasi-standardised methods and materials". Poster presented at the Skin Forum meeting, Newcastle, UK (July 2003).
50. Hattersley, I.J., Dalton, C.H., **Chilcott, R.P.** "In vitro skin absorption of benzene: effects of receptor chamber fluid composition and occlusion" Poster presented at the Skin Forum meeting, Newcastle, UK (July 2003).
51. **Chilcott, R.P.**, Dalton, C.H., Hill, I., Davison, C.M., Blohm, K.L., Clarkson, E.D. Jenner, J. and Hamilton, M.G. "Skin absorption of the nerve agent VX: Part I. *In vivo* studies using the domestic white pig". In "Perspectives in Percutaneous Penetration", Volume 8a p110 (2002).

52. **Chilcott**, R.P., Dalton, C.H., Hill, I., Davison, C.M., Blohm, K.L., Clarkson, E.D. and Hamilton, M.G. “. “Skin absorption of the nerve agent VX: Part II. *In vitro* studies using domestic white pig skin”. In “Perspectives in Percutaneous Penetration”, Volume 8a p109 (2002).
53. **Chilcott**, R.P. “Bioterrorism and the skin”, In “Perspectives in Percutaneous Penetration”, Volume 8a (2002).
54. **Chilcott**, R.P. and Dalton, C.H., 2001. “The effects of UVB radiation on TEWL and water barrier function *in vitro*”, Poster presented at the Stratum Corneum III meeting, Basel, Switzerland (September 2001).
55. Rowland, C.A. and **Chilcott**, R.P., 2001. Diffusion of glucose across human skin during reverse electroporation”, Poster (and oral communication) presented at the Stratum Corneum III meeting, Basel, Switzerland (September 2001).
56. Allen, C.E., Bradley, S.T., Dalton, C.H. and **Chilcott**, R.P., 2001. “The effects of skin punctures on TEWL and water barrier function *in vitro*”, Poster presented at the Stratum Corneum III meeting, Basel, Switzerland (September 2001).
57. Patel, A., Ashley, Z. and **Chilcott**, R.P., 2001. “The effects of sodium lauryl sulphide on TEWL and water barrier function *in vitro*”, Poster presented at the Stratum Corneum III meeting, Basel, Switzerland (September 2001).
58. **Chilcott**, R.P. and Emanuel, A.J., 2001. “The effects of tape-stripping on TEWL and water barrier function *in vitro*”, Poster presented at the Stratum Corneum III meeting, Basel, Switzerland (September 2001).
59. **Chilcott**, R.P., Dalton, C.H., Emanuel, A.J., Patel, A., Allen, C.E., Bradley, S.T., Ashley, Z., Hughes, J.N. and Parkes, J.A. 2001. TEWL: An *In Vitro* Study”, Poster presented at the Gordon Conference on Mammalian Skin Function, Rhode Island, USA (August 2001).
60. Rowland, C.A. and **Chilcott**, R.P., 2001. Diffusion of glucose across human skin during reverse electroporation”, Poster presented at the Gordon Conference on Mammalian Skin Function, Rhode Island, USA (August 2001).
61. Allen, C.E., Bradley, S.T., Jenner, J. and **Chilcott**, R.P., 2001. “Refinement of pig models in toxicological studies by automated monitoring of feeding behaviour: A preliminary study”, Poster presented at the British Toxicology Society Congress, June 2001.
62. Dalton, C.H. and **Chilcott**, R.P., “Exposure to UVB Radiation Does not Directly Impair Skin Barrier Function”, Poster presented at the British Toxicology Society Congress, June 2001.
63. **Chilcott**, R.P., Hotchkiss, S.A.M., Jenner, J. and Rice, P., 2001. “*In Vitro* Evaluation of a Novel Barrier Cream Against Sulphur Mustard”, in Perspectives in Percutaneous Penetration, 7B, Ed. KA Brain *et al*, STS Publishing, Cardiff.
64. **Chilcott**, R.P., Hotchkiss, S.A.M. and Jenner, J., 2001. “Transepidermal Water Loss and Human Skin Permeability *In Vitro*”, in Perspectives in Percutaneous Penetration, 7B, Ed. KA Brain *et al*, STS Publishing, Cardiff.
65. **Chilcott**, R.P., Hutton, O. and Jenner, J., 2001. “Modulation of Sulphur Mustard Skin Absorption by Topical Delivery of Fatty Acids and Cholesterol”, in Perspectives in Percutaneous Penetration, 7B, Ed. KA Brain *et al*, STS Publishing, Cardiff.
66. Rowland, C.A. and **Chilcott**, R.P., 2001. “Diffusion of Glucose Across Human Skin During Reverse Electroporation *In Vitro*”, in Perspectives in Percutaneous Penetration, 7B, Ed. KA Brain *et al*, STS Publishing, Cardiff.
67. **Chilcott**, R.P. and Emanuel, A.C., 2001. “Is Transepidermal Water Loss a True Measure of Skin Barrier Function?”, in Perspectives in Percutaneous Penetration, 7B, Ed. KA Brain *et al*, STS Publishing, Cardiff.
68. Ashley, Z., Stubbs, B., Jenner, J. and **Chilcott**, R.P., 2000. “Quantitative Analysis of Sulphur Mustard-Induced Skin Lesions Using Biophysical Analysis”, in Perspectives in Percutaneous Penetration, 7B, Ed. KA Brain *et al*, STS Publishing, Cardiff.

69. Jenner, J., Ashley, Z., **Chilcott**, R.P., Williams, M. and Dunne, L., 2001. "In vitro evaluation of anti-flash creams", in "perspectives in Percutaneous Penetration", 7B, Ed. KA Brain *et al*, STS Publishing, Cardiff.
 70. **Chilcott**, R P, Hotchkiss, S A M and Jenner, J., 1997. "In Vitro Percutaneous Penetration of Steroids under Comparable Thermodynamic Conditions", in "Proceedings of Perspectives in Percutaneous Penetration", volume 5b, p64-67.
 71. **Chilcott**, R P, Hotchkiss, S A M and Jenner, J., 1997. "In Vitro Evaluation of Barrier Creams against Sulphur Mustard ", in "Proceedings of Perspectives in Percutaneous Penetration", volume 5b, p242-245.
 72. McLean, A.D., Stapely, S.A., Cannon, L., Trimble, K., **Chilcott**, R.P., Kenward, C. and Watkins, P.E.. "A Comparison of hypertonic saline dextran with normal saline for the delayed resuscitation of hypovolaemia following uncontrolled haemorrhage", American Association for the Surgery of Trauma, Conference Proceedings.
 73. **Chilcott**, R P, Hotchkiss, S A M and Jenner, J., 1997. "In Vitro Percutaneous Penetration of Steroids under Comparable Thermodynamic Conditions", in "Perspectives in Percutaneous Penetration", volume 5a, p25.
 74. **Chilcott**, R P, Hotchkiss, S A M and Jenner, J., 1997. "In Vitro Evaluation of Barrier Creams against Sulphur Mustard", in "Perspectives in Percutaneous Penetration", volume 5a, p119.
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Personal Theses

1. "Site specific mutagenesis of the human H-chain ferritin", BSc (dual honours) final year project. Supervised by Dr A. Treffry, Krebs Institute of Biomolecular Research, Department of Molecular Biology and Biotechnology, University of Sheffield (1991).
 2. "Hydroxyl radical-mediated DNA damage on the gal P₁ promotor in Escherichia coli. MSc Thesis. Supervised by Dr S. Minchin, School of Biochemistry, University of Birmingham (1992).
 3. "Vesicant prophylaxis and decontamination". PhD Thesis. Supervised by Dr J Jenner and Dr S Hotchkiss, Department of Molecular Toxicology, Imperial College of Science Technology and Medicine, London (1999).
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Supervised Theses

1. Shetage, SS. Characterisation and analysis of residual skin surface components: Sebomics. PhD Thesis, University of Hertfordshire (2015).
2. Viegas VA. Characterisation of a novel flexing diffusion cell (Cutaflex) for assessing dermal exposure to nanoparticles. PhD Thesis, University of Hertfordshire (2014).
3. Dalton CH. Toxicokinetics and Medical Countermeasures against Soman Following Intradermal Contamination. PhD Thesis, University of Birmingham (2013).
4. Hall CA. Haemostatic Products as a Potential Therapy for Vesicant-Contaminated Wounds. PhD Thesis, University of Birmingham (2012).
5. Jones DR. Optimisation of Mass Casualty Decontamination Methods Following Exposure to Organophosphorus Nerve Agents. PhD Thesis, University of Surrey (2012).
6. Larner J. Optimisation of Mass Casualty Decontamination Showering: Studies with Sulphur Mustard and Simulants. PhD Thesis, University of Surrey (2012).
7. Lydon H. Investigations of a Possible Novel Decontamination Role for a Haemostatic Product: Studies with S-[2-Diisopropylamino)ethyl]-O-ethyl methylphosphonothioate (VX). PhD Thesis, University of Birmingham (2012).

8. Matar H. Development of Interim Decontamination System. PhD Thesis, University of Surrey (2012).
 9. Kerby J. The effects of sebum on the percutaneous absorption kinetics of methanol in vitro. University of Birmingham MSc Thesis (2008).
 10. Courtney S. The effects of sebum on the percutaneous absorption kinetics of benzene in vitro. University of Birmingham MSc Thesis (2008).
 11. Kaur-Kler K. Use of Sebum as a Bio-matrix for Monitoring Chemicals in the Environment. University of Birmingham MSc Thesis (2007).
 12. Wiggins M. The role of β -Carbolines in Parkinson's Disease. University of Birmingham MSc Thesis (2006).
 13. Brady SM. Factors affecting the in vitro skin absorption kinetics of a homologous series of alcohols in the presence of an aqueous receptor fluid. University of Birmingham MSc Thesis (2003).
 14. Rutter SJ. Factors affecting the in vitro skin absorption kinetics of a homologous series of alcohols in the presence of an ethanolic receptor fluid. University of Birmingham MSc Thesis (2003).
 15. Hattersley IJ. Skin absorption of benzene. University of Birmingham MSc Thesis (2002).
 16. Dalton CH. Effects of ultraviolet radiation on skin barrier function and transepidermal water loss in vitro. University of Birmingham MSc Thesis (2000).
 17. Patel A. The effects of sodium lauryl sulphate on skin barrier function and TEWL in vitro. University of Birmingham MSc Thesis (2000).
 18. Emanuel A. Effects of controlled physical damage on transepidermal water loss and permeability of human and pig skin. University of Birmingham MSc Thesis (1999).
 19. Rowland CA. The electrostability and electrically assisted delivery of an organophosphate pretreatment (physostigmine) across human skin in vitro. University of Birmingham MSc Thesis (1998).
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Oral Presentations / Conference Chairs

1. "Mass Casualty Decontamination: Shorter, Faster, Drier", plenary lecture, CBRNE Convergence Conference, Indianapolis, USA, November 2017.
2. "A contemporary perspective of skin decontamination", plenary lecture, CBRNE Conference, France, March 2017.
3. "The epidemiology of NPS: what can we learn from forensic science, drug testing services and waste water analysis?", Co-Chair, IV International Conference on Novel Psychoactive Substances (NPS), Budapest, May 2016.
4. "Skin Decontamination", session Chair, XV International Conference on Perspectives in Percutaneous Penetration, March 2016.
5. "History of skin decontamination and protection", plenary lecture, CBRNE Conference, France, March 2015.
6. "Decontamination Research", session Chair, CBRNE Conference, France, March 2015.
7. "Developments in Mass Casualty Decontamination", invited presentation, CBRN Conference, Rome, February 2015.
8. "Skin Imaging", Session Chair, Perspectives in Percutaneous Penetration Conference, Grande Motte, France, April 2014.
9. "Mass Casualty Mitigation Research". Invited presentation. GEMS Conference, Bristol, 2012.
10. "Human Decontamination – Experimental Studies". Invited Presentation. Counter Terrorism IV Conference. Birmingham, 2011.
11. "Short, Sharp Shower", invited presentation at CBRNE Convergence Conference, Turkey, 2011.
12. "Mass Casualty Events". Session Chair, CBRNE Convergence Conference, Turkey, 2011.

13. "Decontamination". Session Chair, Perspectives in Percutaneous Penetration Conference, Grande Motte, France, April 2010.
14. "Dermal Risk Assessment Methodology – Are Current Approaches Appropriate for Nano-scale Particles?", invited presentation at the British Toxicology Society Autumn Meeting, September 2009.
15. "Chemical Warfare Agents and Skin". Departmental Seminar at the Dermatology Department, University of Cardiff. December 2007.
16. Gordon Conference on Mammalian Skin, Massachusetts, August 2005. Debating session; "Does transepidermal water loss correlate to epidermal barrier properties", leader of the "against" team.
17. International Symposium on Bioengineering and the Skin. Chair of session one: "Barrier homeostasis". October 2004.
18. International Symposium on Bioengineering and the Skin, October 2004. "On the disparity of TEWL and skin permeability". Oral poster presentation.
19. International Symposium on Bioengineering and the Skin, October 2002. "TEWL is not a reliable measure of skin barrier function *in vitro*". Invited presentation.
20. US Army Medical Research Institute of Chemical Defense, October 2002. "Skin absorption of HD: A historical perspective". Invited seminar.
21. Perspectives in Percutaneous Penetration Conference, April 2002, "Bioterrorism and the skin", Antibes Juan-Les Pins, France. Invited lecture, "Hot Topics" session.
22. Stratum Corneum III, Basel, Switzerland, September 2001. "The Reverse Electroporation of Glucose", oral presentation.
23. Skin Forum UK, University of Glasgow, June 2001. "TEWL: An *In Vitro* Study", oral presentation.
24. Skin Forum UK, University of Greenwich, September 2000. "*In vitro* and *in vivo* skin absorption: The Porton Perspective", oral presentation.
25. Perspectives in Percutaneous Penetration Conference, Grande Mot, France, April 2000. "Biophysical Skin Analysis of Chemical Burns", Invited presentation, Toxicology Session.
26. International Contact Dermatitis Conference, San Francisco, October 1999. "Factors Affecting Biophysical Skin Measurements", Invited plenary session presentation.
27. University of California (San Francisco) Medical School, September 1999. "Does TEWL Measure Skin Hydration or Skin Damage?", Departmental Seminar.
28. Gordon Conference on Mammalian Skin, Italy, April 1999. "The Pro's and Con's of Mathematical Modelling of Skin Absorption", Debating Session.

Public Engagement

1. Interview on Novichok Poisoning, LBC Radio (September 2019).
2. Novichok: how are victims surviving poisoning? The Conversation (September 2020).
3. Opium, rat hair, beaver anal secretions – and other surprising things you may find in your food, The Conversation (March 2019).
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5. The dangers of washing up. Naked Scientist interview, Radio 5 Live (August 2017).
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