

Curriculum vitae

Adrian Williams

**Research Dean for Health and
Professor of Pharmaceutics**

February 2018

Novon Pharmaceuticals, Inc.

Personal Details

Name: Adrian Christopher Williams

Present appointment: Professor of Pharmaceutics and
Research Dean for Health
University of Reading

Date of birth: 30th November 1963

Qualifications:

2013: FAPS; Fellow of the UK Academy of Pharmaceutical Sciences.

2007: FHEA; Fellow of The Higher Education Academy (23322).

1992: C.Chem. F.R.S.C. - Chartered Chemist, Fellow of the Royal Society of Chemistry.

1990: Ph.D. in Pharmaceutical Technology, University of Bradford. "Terpenes and Urea Analogues as Penetration Enhancers for Human Skin"

1987: B.Sc. (Honours) in Combined Sciences, Biology and Chemistry, (C.N.A.A.).

Previous appointments:

2011 to 2015: Head, School of Chemistry, Food and Pharmacy, University of Reading

2008 to 2011: Head, School of Pharmacy, University of Reading.

2004 to 2008: Professor of Pharmaceutics, School of Pharmacy, University of Reading.

2002 to 2004: Professor of Biophysical Pharmaceutics, School of Pharmacy, University of Bradford.

1999 to 2002: Reader in Pharmaceutical Technology, School of Pharmacy, University of Bradford.

1997 to 1999: Senior Lecturer in Pharmaceutical Technology, School of Pharmacy, University of Bradford.

1995 to 1997: Lecturer B in the Department of Pharmaceutical Technology, School of Pharmacy, University of Bradford.

1990 to 1995: Lecturer A in the Department of Pharmaceutical Technology, School of Pharmacy, University of Bradford.

Research and scholarship

Research outputs

ORCID ID: 0000-0003-3654-7916;

h-index: 52; i10-index 98; 11,064 total citations. (Google Scholar)

Refereed research papers published in journals:

Bold indicates principal author

1. Mansfield, E.D.H., Pandya, Y., Mun, E.A., Rogers, S.E., Abutbul-Ionita, I., Danino, D., Williams, A.C. and **Khutoryanskiy, V.V.** "Structure and characterisation of hydroxyethylcellulose-decorated silica nanoparticles". RSC Advances, DOI: 10.1039/c7ra08716k
2. **Kademoglou, K.**, Williams, A.C. and Collins, C.D. "Bioaccessibility of PBDEs present in indoor dust: A novel dialysis membrane method with a Tenax TA® absorption sink". Science of the Total Environment (STOTEN). 2018, 621: 1–8. DOI: 10.1016/j.scitotenv.2017.11.097
3. **Lenn, J.**, Neil, J., Donahue, C., Demock, K., Tibbetts, C.V., Cote-Sierra, J., Smith, S.H., Rubenstein, D., Therrien, J.-P., Pendergrast, S., Killough, J., Brown, M.B., and **Williams, A.C.** "RNA aptamer delivery through intact human skin", J. Invest. Dermatol., 2018, 138, 282-290. DOI: 10.1016/j.jid.2017.07.851.
4. Kabova, E.A., Cole, J.C., Korb, O., Williams, A.C. and **Shankland, K.** "Improved crystal structure solution from powder diffraction data by the use of conformational information". J. Appl. Cryst., 2017, 50: 1421-1427. DOI: 10.1107/S1600576717012596
5. Kabova, E.A., Cole, J.C., Korb, O., Lopez-Ibanez, M., Williams, A.C. and **Shankland, K.** "Improved performance of crystal structure solution from powder diffraction data through parameter tuning of a simulated annealing algorithm". J. Appl. Cryst., 2017, 50: 1411–1420. DOI: 10.1107/S1600576717012602
6. Arezki, N.R., **Williams, A.C.**, Cobb, A.J.A. and Brown, M.B. "Design, synthesis and characterisation of linear unnatural amino acids for skin moisturisation." Int. J. Cosmet. Sci., 2016, 39: 72–82. DOI: 10.1111/ics.12351
7. Mun, E.A., Williams, A.C. and **Khutoryanskiy, V.V.**, "Adhesion of thiolated silica nanoparticles to urinary bladder mucosa: Effects of PEGylation, thiol content and particle size", Int. J. Pharm., 2016, 512: 32-38. DOI: 10.1016/j.ijpharm.2016.08.026
8. Mansfield, E.D.H, de la Rosa, V.R., Kowalczyk, R.M., Grillo, I, Hoogenboom, R., Sillence, K., Hole, P., Williams, A.C. and **Khutoryanskiy, V.V.**, "Side chain variations radically alter the diffusion of poly(2-alkyl-2-oxazoline)s functionalised nanoparticles through a mucosal barrier". Biomaterials Science, 2016, 4, 1318-1327. DOI: 10.1039/c6bm00375c.
9. Spillman, M.J., **Shankland, K.**, Williams, A.C. and Cole, J.C. "CDASH: a cloud-enabled program for structure solution from powder diffraction data". J. Appl. Cryst., 2015, 48, 2222–2229. DOI: 10.1107/S160057671500240X

10. Mansfield, E.D.H, Sillence, K., Hole, P., Williams, A.C. and **Khutoryanskiy, V.V.**, "POZylation: a new approach to enhance nanoparticle diffusion through mucosal barriers". *Nanoscale*, 2015, 7, 13671-13679. DOI: 10.1039/C5NR03178H
11. **Ng, K.W.**, Lau, W.M. and Williams, A.C., "Towards pain-free diagnosis of skin diseases through multiplexed microneedles: biomarker extraction and detection using a highly sensitive blotting method". *Drug Delivery and Translational Research*, 2015, 5, 387-396. DOI: 10.1007/s13346-015-0231-5
12. Bizley, S.C., Williams, A.C. and **Khutoryanskiy, V.V.** "Thermodynamic and kinetic properties of interpolymer complexes assessed by isothermal titration calorimetry and surface plasmon resonance". *Soft Matter*, 2014, 10, 8254-8260. DOI: 10.1039/c4sm01138d
13. Mun, E.A., Morrison, P.W.J., Williams, A.C. and **Khutoryanskiy, V.V.**, "On the barrier properties of the cornea: a microscopy study of the penetration of fluorescently-labelled nanoparticles, polymers and sodium fluorescein", *Mol. Pharm.*, 2014, 11 (10), 3556-3564. DOI: 10.1021/mp500332m
14. Mun, E.A., Hannell, C., Rogers, S.E., Hole, P., Williams, A.C. and **Khutoryanskiy, V.V.** "On the role of specific interactions in the diffusion of nanoparticles in aqueous polymer solutions", *Langmuir*, 2014, 30, 308-317. DOI: 10.1021/la4029035
15. Aravindan, L, Bicknell, K.A., Brooks, G., **Khutoryanskiy, V.V.** and **Williams A.C.**, "A comparison of thiolated and disulphide-crosslinked polyethylenimine for nonviral gene delivery", *Macromol. Biosci.*, 2013, 13, 1163-1173. DOI: 10.1002/mabi.201300103
16. Majumder, M., Buckton, G., Rawlinson-Malone, C., Williams, A.C., Spillman, M.J., Pidock, E., **Shankland, K.** "Application of hydrogen-bond propensity calculations to an indomethacin-nicotinamide (1:1) co-crystal". *Cryst. Eng. Comm.*, 2013, 15, 4041-4044. DOI: 10.1039/c3ce40367j
17. **Williams A.C.**, "Brian Barry; Innovative Contributions to Transdermal and Topical Drug Delivery". In Special Issue "Developments in Skin Delivery: To Scheuplein and Beyond", *Skin Pharmacology and Physiology*, 2013, 26, 234-242. DOI: 10.1159/000351946.
18. Arif, I.S., Hooper, C.I., Greco, F., **Williams, A.C.**, **Boateng, S.Y.** "Increasing doxorubicin activity against breast cancer cells using PPAR γ -ligands and by exploiting circadian rhythms", *British Journal of Pharmacology*, 2013, 169, 1178-1188. DOI: 10.1111/bhp.12202.
19. Niemczyk, A.I., **Williams, A.C.**, Rawlinson, C.F., Hayes, W., Greenland, B.W., Chappell, D., Khutoryanskaya, O. "Novel polyvinylpyrrolidones to improve delivery of poorly-water soluble drugs; from design to synthesis and evaluation", *Mol. Pharm.*, 2012, 9, 2237-2247. DOI: 10.1021/mp300079x.
20. Sogias, I.A., Williams, A.C., **Khutoryanskiy, V.V.** "Chitosan-based mucoadhesive tablets for oral delivery of ibuprofen". *Int. J. Pharm.*, 2012, 436, 602-610. DOI: 10.1016/j.ijpharm.2012.07.007

21. Bizley, S.C., Williams, A.C., Kemp, F., **Khutoryanskiy, V.V.** "Optimizing layer-by-layer deposition of interpolymer complexes on solid substrates using Biacore". *Soft Matter*, 2012, 8, 6782-6787. DOI: 10.1039/C2SM25652E
22. Rizi, K., Green, R.J., Donaldson, M. **Williams, A.C.**, "Using pH abnormalities in diseased skin to trigger and target topical therapy", *Pharm. Res.*, 2011, 28, 2589-2598. DOI: 10.1007/s11095-011-0488-4
23. Majumder, M., Buckton, G., Rawlinson-Malone, C., Williams, A.C., Spillman, M.J., Shankland, N, **Shankland, K.** "A carbamazepine-indomethacin (1:1) cocrystal produced by milling", *Cryst. Eng. Comm.*, Nov. 2011, 13, 6327-6328. DOI: 10.1039/c1ce05650f
24. Rizi, K., Green, R.J., Khutoryanskaya, O., Donaldson, M. **Williams, A.C.**, "Mechanisms of burst release from polymeric microparticles", *J. Pharm. Pharmacol.*, 2011; 63, 1141-1155. DOI: 10.1111/j.2042-7158.2011.01322.x
25. Rizi, K., Green, R.J., Donaldson, M. **Williams, A.C.**, "Production of pH-responsive microparticles by spray drying: Investigation of experimental parameter effects on morphological and release properties", *J. Pharm. Sci.*, 2011, 100, 566-579. DOI: 10.1002/jps.22291
26. Ali, W., **Williams, A.C.**, and Rawlinson, C.F., "Stoichiometrically governed molecular interactions in drug:Poloxamer solid dispersions", *Int. J. Pharm.*, 2010, 391, 162-168. DOI: 10.1016/j.ijpharm.2010.03.014
27. Sogias, I.A., Khutoryanskiy, V.V. and **Williams, A.C.**, "Exploring the factors affecting the solubility of chitosan in water", *Macromol. Chem. Phys.*, 2010, 211, 426-433. DOI: 10.1002/macp.200900385
28. Aravindan, L, Bicknell, K.A., Brooks, G., Khutoryanskiy, V.V. and **Williams AC.**, "Effect of acyl chain length on transfection efficiency and toxicity of polyethylenimine", *Int. J. Pharm.*, 2009, 378, 201-210. DOI: 10.1016/j.ijpharm.2009.05.052
29. Sogias, I.A., **Williams, A.C.** and Khutoryanskiy, V.V., "Why is chitosan mucosadhesive?", *Biomacromolecules*, 2008, 9 (7), 1837-1842.
30. Khutoryanskaya, O.V., Williams, A.C. and **Khutoryanskiy, V.V.**, "pH-Mediated interactions between poly(acrylic acid) and methylcellulose in the formation of ultrathin multilayered hydrogels and spherical nanoparticles", *Macromolecules*, 2007, 40 (21), 7707-7713.
31. Rawlinson, C.F., **Williams, A.C.**, Timmins, P.T. and Grimsey, I., "Polymer-mediated disruption of drug crystallinity", *Int. J. Pharm.*, 2007, 336, 42-48.
32. DeMatos, L.L., **Williams, A.C.**, Booth, S.W., Petts C.R. and Blagden, N. "Solvent influences on metastable polymorph lifetimes: Real-time interconversions using energy dispersive X-ray diffractometry", *J. Pharm. Sci.*, 2007, 96, 1069-1078.
33. El Maghraby, G.M.M., Williams, A.C. and **Barry, B.W.** "Can drug-bearing liposomes penetrate intact skin?" *J. Pharm. Pharmacol.*, 2006, 58, 415-429.

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.