

Dr Anna Ploszajski MEng (Oxon) MRes EngD FIMMM

I'm an award-winning industry-leader in storytelling for communication and public engagement. It's my professional mission to engage underserved communities with science and engineering through storytelling in various media, including writing, presenting, stand-up comedy and broadcasting. I have developed my own business training scientists, engineers, teachers and policy-makers in storytelling to help them do the same, and lead world-class interdisciplinary projects aiming to make complex science and engineering accessible to those least likely to feel welcome in those worlds. With a proven track record in using storytelling for science communication, fund-raising, interdisciplinary collaborations, positive social change and technical public engagement, I am now working on projects that bring all of these aspects together as a Story Associate with the UK Reproducibility Network and University of the Arts London.



Career Timeline

Science Communicator and Storyteller (present)

- 2023-present Story Associate for StoryArcs, in association with the UK Reproducibility Network and UAL
- 2021-present Full-time freelance science communicator, trainer and storyteller
- 2020-2021 Grant writer and Public Engagement Champion at Imperial College London
- 2018-2021 Author: *Handmade: A Scientist's Search for Meaning Through Making*, Bloomsbury Sigma
- 2014-2021 Part-time freelance science communicator

Academic Research

- 2018-2020 Post-doctoral research on the development of a 4D manufacturing platform
EPSRC Doctoral Prize research fellowship at The Institute of Making, UCL
- 2014-2017 EngD: Polymer-hydride nano-composites for solid state hydrogen storage, UCL
- 2013-2014 MRes: Ammonia adsorption materials for clean hydrogen gas streams, UCL
- 2012-2013 MEng: Polymer hydride nano-composites for solid state hydrogen storage, Oxford University

Further Education

- 2013-2017 Engineering Doctorate in Materials Science; 'Polymer-Hydride Nanocomposites for Solid-State Hydrogen Storage' [EngD (no corrections), MRes (distinction)] – UCL
- 2009-2013 Undergraduate in Materials Science [MEng (first class)] – Oxford University
- 2007-2009 A Levels: Maths (A), Further Maths (A), Physics (A), Music (A), AS Level Spanish (A) – Dame Alice Harpur School, Bedford

Science Communication, Public Engagement and Storytelling

Training: I have developed a suite of storytelling courses for scientists, engineers, policy-makers and teachers, including skills in Storytelling, Presentations and Engagement. Previous clients include 12 UK universities, as well as Nesta, Johnson & Johnson, UKRI Innovate UK, PepsiCo and the Royal Academy of Engineering.

Bedtime Stories for Very Young Engineers: Funded for £29,000 by the Royal Academy of Engineering Ingenious Grant, I led this first-of-a-kind project where I recruited and trained 30 diverse engineers in the art of storytelling to write bedtime stories about engineering to 2- to 5-year-olds. We produced 24 free-to-access videos of the engineers reading their stories, aiming to tackle ingrained gender and racial bias in this audience.

Book: *Handmade, A Scientist's Search for Meaning Through Making*: Bloomsbury Sigma (agent Laura Macdougall, United Agents) (May 2021). Centres non-scientific autobiographical stories as the driving narrative of the chapters, such as swimming the English Channel (Sugar), sexual harassment in the workplace (Clay) and my Polish Grandfather's tumultuous life story (Plastic).

Public talks: I regularly give invited story-based public talks and demonstrations on a variety of topics to adult, schools and family audiences across the UK and internationally, including The Royal Institution and the Science Museum. My TedX talk has 33.8k views on YouTube, a Royal Institution talk 45k views.

Podcast: Handmade - over 90 conversations with craftspeople, aiming to break down barriers between art and science through materials; ran for six years, with over 60k listens across five continents.

Stand-up comedy: I frequently deliver story-based stand-up comedy sets about materials science and engineering across the UK, from the local pub to the Edinburgh Fringe, aiming to tackle public perceptions of scientists.

Broadcasting: I have appeared on various national radio and TV shows, including The Infinite Monkey Cage, The Curious Cases of Rutherford and Fry, The Guardian Science Weekly and The Science Channel's Strangest Things.

Awards, Prizes, Grants and Fellowships

Apr 2022	Fellow of the Institute of Materials, Minerals and Mining
May 2021	Ingenious Award from the Royal Academy of Engineering
May 2019	Nesta Tipping Point Runner Up Prize for article on 4D materials
Sept 2018	Marshall Stoneham Prize from UCL Physics for outstanding postgraduate research
June 2018	Silver Medal from the Institute of Materials, Minerals and Mining
June 2017	Royal Academy of Engineering Young Engineers Trust Young Engineer of the Year
Apr 2016	Early Career Researchers Conference, Abingdon, UK, best oral presentation
Apr 2014	The James S Walker Award from The Institute of Materials, Minerals and Mining
Oct 2013	The R H Craven Award from The Institute of Materials, Minerals and Mining
Nov 2012	Mansfield College Science Prize for consistently excellent progress.
Sept 2012	John Sykes Prize for excellent performance in Part I Materials Science.
June 2010	Academic Scholarship from Mansfield College, Oxford.
June 2010	Armourers and Brasiers Rolls-Royce Prize

Academic Publications and Patents

- A novel ammonium pentaborate – poly(ethylene-glycol) templated polymer-inclusion compound: **A. R. Ploszajski**, M. Billing, N. T. Skipper and J. K. Cockcroft, *Chem. Commun.*, 2019, **55**, 8290-8292.
- 4D Printing of Magnetically Functionalized Chainmail for Exoskeletal Biomedical Applications: **A. R. Ploszajski**, Richard Jackson, Mark Ransley and Mark Miodownik, *MRS Advances*, 2019, **4**, 1361-1366.
- Crystalline Structure of an Ammonia Borane – Polyethylene Oxide Cocrystal: A Material Investigated for its Hydrogen Storage Potential: **A. R. Ploszajski**, M. Billing, J. K. Cockcroft and N. T. Skipper, *CrystEngComm*, 2018, **20**, 4436-4440.
- Freeze-dried ammonia borane-polyethylene oxide composites: Phase behaviour and hydrogen release: **A.R Ploszajski**, M. Billing, A.S. Nathanson, M. Vickers and S.M. Bennington, *Int. J. Hydrogen Energy*, 2018, **43**, 5645-5656
- Ammonia borane-polyethylene oxide composite material for solid hydrogen storage, A.S. Nathanson, **A. R. Ploszajski**, M. Billing, J. P. Cook, D. W. K. Jenkins, T. F. Headen, Z. Kurban, A. Lovell and S. M. Bennington, *J. Mater. Chem. A*, 2015, **3**, 3682-3681.
- A Hydrogen Storage Pellet, S. Bennington, A. Lovell, T. Headen, **A. Ploszajski**, J. Cook, Z. Kurban. Patent number US 20140178292 A1, 2014.

For Fun

Ultramarathon swimming: I swim ultramarathon distances in lakes, rivers and seas around the world. In July 2018 I became the 1862nd person to swim the English Channel, in 15 hours and 37 minutes.

Musician: ABRSM Grade 8 Trumpet: Distinction (2007) and Grade 8 Violin: Merit (2008). I currently play the trumpet in a funk and soul covers band called Don't Freak Out.