## Dr Susan Mossman: CURRICULUM VITAE

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## **Current role:**

Research Associate, Science Museum Group, UK: June 2019 – to date Consultant, Materials Science and Archaeometallurgy: June 2019 – to date Chair, Plastics Historical Society

#### Project Direction & Leadership, Exhibitions, Science Museum, London UK to May 2019

As **Senior Exhibition Manager**, I was responsible for directing, planning, overseeing and leading the content development, installation, quality and budgets of a range of temporary large and medium-scale national and international exhibition projects as well as managing and mentoring staff.

#### **Curatorial background**

Interim Head of Collection, Petrie Museum, University College London: May 2022 - to May 2023

Senior Curator of Materials Science at the Science Museum, London, UK to 2005: then ongoing consultancy.

# Academic Background

#### **Academic Qualifications**

- BA (Hons.), Ancient History & Archaeology
- PhD, Mycenaean Lead: Archaeology & Technology
- MSc, Advanced Materials technology

#### **Research/Publications experience (see Appendix)**

I edited and contributed to two books (for the Royal Society of Chemistry and Leicester University Press) for academic and specialist audiences. My third book, *Fantastic Plastics: product design and consumer culture* (2008), was written for a general audience after curating a related exhibition. Publications include over forty articles on ancient metallurgy, museology, and modern materials. Other significant publications include contributions to the Oxford Companion to the History of Science and an illustrated dictionary of Materials & Techniques in the Decorative Arts.

My experience includes PhD supervision and examination at the Royal College of Art and teaching on a number of postgraduate courses (i.e.: Imperial College, the Royal College of Art, Victoria & Albert Museum, Chelsea School of Art, Central St Martins, The Courtauld, Tokyo Institute of Technology).

Lectures include international conferences in Europe, North America and Japan (venues including the National Museum, Norway, Tokyo Institute of Technology, La Villette, The Smithsonian, the American Chemical Society and the Canadian Conservation Institute) and was Visiting Scholar at Queen's University, Canada. I have also lectured to the Newcomen Society, IOM3, and various other UK Universities, Museums and Societies.

#### Academic awards

Fellowship of the Institute of Materials, Minerals and Mining (FIMMM)

Research grants from the British Academy, the Institute of Historical Research and two Greek Government Scholarships.

#### **External Committees**

- Plastics Historical Society, Chair (2019 to date)
- Curatorial Advisor, Museum of Design in Plastics, Arts University College, Bournemouth (2011 to date).
- Historical Metallurgy Society (Archives committee; past Conservation Officer/Membership Secretary).
- British School at Athens, Trustee, Managing Committee (2004 2012).
- European Space Agency's International Advisory Committee for the Intermetallic Materials Processing in Relation to Earth and Space Solidification Project (IMPRESS) (2003-2009).
- Past chair, Strategy Commission of the IOM3.
- London Materials Society (chair 2004 05; committee member) Institute of Materials, Minerals and Mining (IOM3) (until February 2023).

# **APPENDIX:** Publications

#### **Books**

2008: Fantastic Plastics: Product Design and Consumer Culture, London: Black Dog Publishing.

2000a & 1997a: Early Plastics: Perspectives 1850-1950 (ed.), London, Leicester University Press (paperback edition, 2000).

1994a: The Development of Plastics (ed. with P. Morris), Royal Society of Chemistry, Cambridge.

### Modern materials: Articles

**2022a:** Bakelite, *Plasticity – A History of Plastics in Portugal*, Municipio de Leiria, Gracal – Gráfica Caldense, 31-32.

**2020a:** Plastics and Social Responsibility, *Provocative Plastics*, Susan Lambert (Ed.), Palgrave Macmillan, 275-295. **2020b:** *Cellulosics: a circle of sustainability*, The Plastics Heritage Congress 2019 - Proceedings, Maria Elvira Callapez, Susana França de Sá, Artur Neves (Eds.), Ludus 2020

**2017:** Early plastics: perspectives 1850-1950, *Ferrum, Künstliche Stoffe: Die synthetische Umformung der Welt, Eisenbibliothek* (89) 2017, 14-22.

2015: The Rubbish Collection at the Science Museum, London, UK, *Museum* (Estonian Museum Association)

2014: 'Stephanie Kowlek – Lady of Kevlar', Plastiquarian, 52, December 2014, 4-5.

**2011:** 'Beyond the Lab – Science Museum in London features plastics', *Materials Research Society Bulletin* (Cambridge, Cambridge University Press, Vol.36, August 2011), 586-588.

2009: Synthetic fibres, from dreams to reality, *Plastiquarian*, 41, April 2009, 4-5.

**2008 b:** Testing treatments to slow down the degradation of cellulose acetate, *Plastics: looking at the future & learning from the past,* (with M-L Abel; ed. B Keneghan & L Egan), Archetype Publications, *106-115.* 

2008c: Parkesine and Celluloid - from Britain to America. Plastiquarian, Summer 2008.

**2008 d:** 75 Years of Polyethylene: Past Successes and Future Challenges, *Appl. Rheol.* 18 (2008) 316. (With Mitchell G, Davis F, Vaughan A).

**2008e:** In defence of plastic, Editorial, *BBC Magazine* (online), 15 September, 2008. (http://news.bbc.co.uk/1/hi/magazine/7613064.stm).

2008f: Identifying and caring for plastics. Dress and Textile Specialists Journal, April 2008, 5-9.

2005a Induction of Alexander Parkes into the American Plastics Academy's Hall of Fame, *Plastics Historical Society Newsletter*, October, 2005, 1.

**2005b** MSc Dissertation in Advanced Materials Technology, *Slowing down the Degradation of Cellulose Acetate*, University of Surrey, July, 2005.

**2005c** Entries on `Composite materials' (pp.178-180), `Plastics, thermoplastics' (pp.590-592), `Plastics, thermosetting' (pp. 592-595), `Smart and biomimetic materials' (pp. 711-713), *Encyclopedia of 20<sup>th</sup>-Century Technology*. Eds. Colin A Hempstead and William E Worthington, Jr. New York: Routledge, 2005. 2 vols.

**2002a:** *Early Plastics: influences and connections*, Materials: Research, Development and applications, Proceedings of the XXth International Congress of History of Science, (Liege, 20-26 July 1997), ed. by H-J Braun & A Herlea, Brepols Publishers, Turnhout, 127-138.

2001a: The Science Museum looks forward, *Plastiquarian*, Winter 2000, no.25, 20.

**2000b:** *Plastics Entries,* Materials & *Techniques in the Decorative Arts: An Illustrated Dictionary,* ed. by L. Trench, John Murray, London, 1-2, 19-21, 36, 70-72,131, 153, 175-176, 214, 225, 229, 243, 309, 332, 354, 363, 364, 381-383, 385-387, 420-421, 438-440, 442, 450, 481, 490, 509, 518, 555.

**1995a:** Saving Celluloid - The Plastics Collection at the Science Museum and its Preservation, *Diversity into the Next Century*, Proceedings of the 27th SAMPE Technical Conference, **Albuquerque**, **New Mexico** (with E Then), Society for the Advancement of Material and Process Engineering, Covina, California, 1118-1124.

**1995b:** Synthetic Fibres, *Preprints of the Plastics Conservation Workshop*, Royal Museums of Scotland, Edinburgh, 3 April.

**1994b:** Parkesine and Celluloid, *The Development of Plastics* (ed. by S Mossman & P Morris), Royal Society of Chemistry, Cambridge, 10-25.

**1993a:** Plastics in the Science Museum, London - A Curator's View, *Saving the Twentieth Century: The Conservation of Modern Materials*, (ed. by David W Grattan), **Canadian Conservation Institute**, Ottawa, 25-35.

**1992a:** The First Plastic, *Making of the Modern World* (ed. by Neil Cossons), John Murray, October, 94-95.

**1992b:** The problems of synthetic fibres, *Polymer Preprints*, The Division of Polymer Chemistry, Inc., **American Chemical Society**, Washington, D.C., Volume 33, Number 2, August, 662-663.

1992c: The early years of artificial fibres, *Plastiquarian*, Number 10, Summer, 11.

1992d: Bright Spark: Alexander Parkes, EG Guardian, 11 February.

1991a: The world of plastic, *Questions*, October, Volume 4, Issue 2, 24-25.

1990a: Oyonnax, *Plastiquarian*, No.5, p 12, Summer.

**1990b:** The Early Development of Plastics, *The Plastics Age* (ed. by Penny Sparke), Victoria & Albert Museum, London, 16-23.

**1988a:** Simple Methods of Identifying Plastics, *Preprints of Meeting on Modern Organic Materials*, Scottish Society for Conservation and Restoration, University of Edinburgh, 41-45.

1987: Plastics in Museums, Social History Curators Group Journal 15, 1987/88, 30-33.

#### Archaeometallurgy: articles

**2009:** "Objects of metal", in: *Sparta, Menelaion I: The Bronze Age*, Vol I (Supplementary Volume No.45), H W Catling, British School at Athens, 269.

**2003** Metallurgy, in: Oxford Companion to the History of Modern Science, (ed. By J L Heilbron), Oxford University Press, Oxford, 514-515.

**2001b**: Mycenaean Lead: a fresh look at an old material, in: *Trade and Production in Premonetary Greece: Acquisition and Distribution of Raw Materials and Finished Products*, eds. C Gillis, C Risberg, B Sjöberg, Studies in Mediterranean Archaeology and Literature, Pocket-book 154, Paul Astroms Forlag, Jonsered, 85-119.

**1998a:** Appendix I - The Lead Finds, *Excavations on the Acropolis of Midea*, Vol.I:1. The Excavations on the Lower Terraces 1985-1991 by Gisela Walberg, Skrifter Utgivna av Svenska Institutet I Athen, 4o, XLIX: I:1, 271-276.

1993a: Ph.D. Thesis: Mycenaean Lead: Archaeology and Technology, Ph.D. Thesis, University of Birmingham, 1993.

**1993b**: Mycenaean Lead, Bulletin of the Institute of Classical Studies, vol.38, 1991-1993, 270.

### **Other Topics**

**2023:** Catalogue entries in: *Face to Face: the people behind mummy portraits*, eds. B van den Bercken, O. Kaper, WBooks, 166-170.

2022b: Petrie Museum Updates, Friends of the Petrie Museum Magazine, Issue 54, 2021-2022, 30.

**1999:** The Challenge Gallery at the Science Museum, *Textiles & Diversity*, ed. M O'Mahoney, University of Loughborough, Loughborough, unpaginated.

1997b: Exploring the World of Materials Science at the Science Museum, Museums in Britain, 3, 41-42.

**1990c:** Spinning Sugar, *Questions*, January, Volume 2, Issue 4, 16-17 (with M Williams).

1988b: A Half Century of MPG, Museums Professionals Group News 29, 2-3.

#### Reviews

**2022c:** Beyond Bakelite: Leo Baekeland and the Business of Science and Invention by Joris Mercellis. Pp. 378, illus., index. The MIT Press: Cambridge, Massachusetts, *Ambix*, Vol.69, 2022, Issue 4, 429-431.

**2015:** Aluminum Dreams. The Making of Light Modernity by Mimi Sheller, The MIT Press, *Nuncius, Volume 30, Issue 3, 748 – 750* 

**2011:** Giant Molecules: From Nylon to Nanotubes by W. Gratzer, Oxford University Press, *Ambix*, Vol.58, No.2, July .2011, 183-184.

**2008g**: Saving plastics for posterity. Review of *Conservation of plastics: Materials science, degradation and preservation* by Y Shashoua; *Nature*, Vol.455/18 September, 2008, 288-289.

**2002b:** The Coming of Materials Science by R W Cahn, Pergamon, Ambix, Vol.XLVIII, November 2001, No.3, 204-205.

**2000c:** *Inventing Polymer Science* by Y Furuwaka, University of Pennsylvania press, *New Genetics & Society, 19, no.2, 208-209.* 

**1998b:** Report on the Bessemer Centenary Conference, HMS News (Historical Metallurgy Society), No.39, 6-7.

1997c: Report on the Spring meeting (the Challenge Gallery), HMS News (Historical Metallurgy Society), No.36, 1.

1992e: The Manchester Conference Reviewed, Plastiquarian, No.9, Winter, 1991-92, 14-15.

#### Blogs

**2013a:** 'Onward Ever' – Sir Henry Bessemer

[http://blog.sciencemuseum.org.uk/collections/2013/01/19/onward-ever-sir-henry-bessemer-frs-19-1-1813-15-3-1898/] **2013b:** Alexander Parkes – Materials Man and Polymath

[http://blog.sciencemuseum.org.uk/collections/2013/12/29/alexander-parkes-materials-man-and-polymath/]