**Trevor W R Dean**



**Curriculum Vitae**

***of***

**Trevor W R Dean**

*(Friday, 02 August 2013)*

**‘South View’, 2 Windmill Lane, Widmer End, High Wycombe, Buckinghamshire,**

**ENGLAND, HP15 6AF**

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**Personal Details**

 **Surname:** DEAN

 **First Names:** Trevor William Ridgley

 **Place of Birth:** High Wycombe, Buckinghamshire, England

 **Date of Birth:** 09.02.1937

 **Father's Name:** William DEAN

 **Mother's Name:** Maud RIDGLEY

 **Nationality:** British

**Qualifications**

* Higher National Certificate (Chemistry)
* Member of the Royal Society of Chemistry (MRSC)
* Member of the Institute of Management (MCMI)

**Languages**

* Technical French
* Romanian
* Some Turkish
* Some Technical German

**Other Interests and Activities**

* Heritage projects.
* Music
* Past Chairman Widmer End Residents’ Association (1999 – 2010)
* Trustee, Grange Action Group Trust (preserving AONBs around High Wycombe)
* Parish Councillor (Hughenden) and Chairman of Action and Policy Working Group (2003 – 2007)
* Trustee of Hughenden Parish Allotment Charity.
* Panel Member, Buckinghamshire Education Appeals (2004 - 2009 )
* Committee Member of British Association of Paper Historians.
* Committee Member of Bucks Local History Network.

**Summary of Employment History**

* 1. **Wiggins Teape, Glory Mill,**

 **Wooburn Green, Buckinghamshire**

 *Mill produced photographic and dyeline papers and interleavings; it also carried out extrusion coating using a multi-head extruder.*

 **Quality Control Assistant**

Responsible for the testing all mill products on shift including photographic and dyeline bases, baryta coated papers and embossed card.

 **Senior Research Assistant**

Working on the development of stearate and stearate/wax sizing and investigating baryta and silver emulsion coating problems with Kodak, Ilford, Casio, Kentmere and Agfa Gevaert

* 1. **Wolvercote Paper Mill,**

**Wolvercote, Oxford**

 *Paper mill making on-machine coated papers, book papers for Oxford University Press and cartridge papers.*

 **Technical Liaison Officer**

Responsible to the Technical Manager for all product development and customer liaison in the United Kingdom and Europe. Also involved in collecting information prior to the installation of the first on-line computer in a UK paper mill. Products developed included: -

* Coated papers for heat-set web offset.
* Coated cartridge papers.
* High pick strength coatings.
* Coated papers for wax lamination.
* High gloss coatings
	1. **Combinatul de Cellulosa si Hirtie,**

 **Calarasi, Romania.**

(*for Parsons and Whittemore Lyddon, New York). This integrated mill was designed to produce 50 000 tonnes of bleached straw pulp per annum.*

 **Technical Co-ordinator**

 Responsible for the co-ordination of the various technical departments of the complex and for the training of local technicians and graduates. Also responsible for overall problem solving and process/quality control as well as customer liaison. Areas of responsibility included:

 - research and development laboratories (92 graduates and engineers)

 - raw water and effluent treatment

 - straw cleaning and preparation

 - digestion, washing, bleaching, cleaning and chemical recovery

 - stock preparation, papermaking and coating

 - quality control of pulp, paper and converted products

* 1. **Power Gas Corporation,**

**Worship Street, London**

 *Contractors to the petrochemical industries.*

 **Senior Buyer**

Responsible for buying waste heat boilers, steelwork and instruments when Power Gas was building the Immingham oil refinery for Continental Oil.

* 1. **Inveresk Paper Company,**

**Wells, Somerset and London**

 *Large group with 14 mills in England and Scotland. At the time Inveresk was the fourth largest paper and board making group in the United Kingdom.*

 **Chief Development Chemist**

Responsible for all group plain paper product development including photo base, dyeline base, decorative laminate base, filter papers, flame retardant papers and security papers (bond and currency) with a team of 4 graduates and 4 assistants.

. **Group Technical Director**

Responsible for the co-ordination of the various technical programmes throughout the Inveresk Group.

* 1. **Consultant** – typical projects are listed below:

|  |  |
| --- | --- |
| **Client** | **Project(s)** |
| ISEGA GmbHGermany | Training over one thousand Syrian personnel in theDeir-Ez-Zor Pulp and Paper Mill (straw). |
| Joseph WinterburnBury, UK | Marketing papermaking equipment in Romania |
| James Kenyon and SonBury, UK | Assessing felt performance in Romania. |
| Arrow Projects LimitedLondon | Work on Columbian Paper Mill Project |
| Hamang PapierNorway | Overseeing a diversification programme into technical and security papers. |
| Binnie and PartnersLondon | Effluent treatment system for the Afyon Pulp Mill (reed and straw) of SEKA, Turkey |
| Capital Paper LimitedLondon | Quality control of Romanian paper from Calarasi, Palas and Braila Mills (beech, straw and reed) |
| Korru-tek AGSwitzerland | Development of low pressure pulping process (in co-operation with British Petroleum and Hch. Sieger, Germany). |
| AB InventingSweden | Marketing coating equipment in Eastern Europe. |
| Blue Circle GroupHull and London | Product development for the paper industry and running paper filler trials at UMIST and Wolvercote; also in Romania and Israel.  |
| ADAS  | Joint organiser of Oxford Straw Conferences. |
| East Lancashire Paper MillRadcliffe, UK | Paper filler level optimisation. |
| **Client** | **Project(s)** |
| Envair (UK) LimitedHaslingden, UK | Project control in Romania (clean rooms). |
| Export Packaging ServicesBanbury, UK | Marketing services in Romania. |
| Scapa-Porritt LimitedBlackburn, UK | Felt survey in Romania. |
| TechnionItaly | Market survey for plastic extruders in UK. |
| Adamjee IndustriesPakistan | * Quality improvements in Nowshera Mill, NWFP, (tissue through to board; fibre source was kahi grass).
* Preparation of technical presentation for 1980 International Coating Conference (PITA)
 |
| TehnoforestexportRomania | Consultant and agent for UK pulp and paper market. |
| PIRALeatherhead, UK | * Co-ordinator for the Straw Consortium
* Technical studies on: -
* indigenous raw materials
* kenaf pulping in Africa
* Turkish Research Centre
* Small scale pulping
* Turkish coating project
* Marketing studies on: -
* alginates and cellulose derivatives
* lignin derivatives
* gypsum
* biofuels
 |
| UNIDOVienna | * As coating expert for Turkey
* As R&D expert for Turkey
* As pulping expert for Turkey (Mediterranean pine, straw and cotton linters)
 |
| British Paper and Board Industry Federation | Co-ordination of 1980 coating conference and production of all art work, slides, music and slide/tape programmes. |
| VittingfossNorway | Product development and quality improvement (self-copy papers) |
| European Investment BankLuxembourg  | 5 missions to SEKA, Turkey. Included work at Dalaman Mill where there was also cotton linters pulping line. |
| Coppas International LimitedLondon and USA | Selection and organisation of start-up teams for pulp and paper projects in Turkey, Iraq, Iran, Algeria and Tunisia. |
| Parsons and WhittemoreLondon and USA | * Training of Algerian students (papermaking and coating).
* Design of laboratories for El Harrach, Algeria
* Design of stock preparation for El Harrach, Algeria
 |
| SEKATurkey | Optimisation of cigarette production at Kastamonu Mill. |
| British Government | 3 training programmes for SEKA, Turkey (1,3 and 4 months) |
| Wolvercote Paper MillOxford, UK | Member of team developing Fillfloc (filler optimisation system) and. Foamcote (surface treatment with foam). |

**Summary of Employment History** *(continued)*

* 1. **The Cross and Bevan Laboratories**

 **Arlesey, Bedfordshire**

 **Senior Partner** and then **Sole Proprietor** (1987).

 During this period the organisation was diversified into training, research and aquatic toxicology and the laboratories were completely re-designed and re-built. For over 70 years the laboratory was an internationally recognised wood and non-wood pulp testing centre. Introduced eucalyptus pulp into the UK and European paper and board industry and developed special deinking technology.

* 1. **Binnie Environmental Limited (BEL),**

 **Arlesey, Bedfordshire**

 **Managing Director**

 At the beginning of 1991 Binnie and Partners (90%) and T W R Dean (10%) formed BEL and this new company took over The Cross and Bevan Laboratories.

**1992-1994 Pira International**

 **Randalls Road, Leatherhead, Surrey**.

 **Principal Consultant**

 Specialising in pulp and paper projects (China, Kazakhstan, Russia and Romania). Also initiated MultMedia training project on **refining** (with Cranfield University) funded by ETSU and the EU. Chairman and presenter at Straw Conference (1993), chairman and presenter at Non-wood International Conference (1994).

**1994**-**1996 Trevor W R Dean (Consultant)**

* Carrying out start-up training programme and preparing full training manuals for a tissue mill in Lebanon.
* Bought assets, archives, etc. of Cross and Bevan (June 2001) with two partners**.**
* Technical Adviser to both Venex and Inveresk plc until 2000

**1996** 🡺 **Indevco Group,**

 **Lebanon**

 *Group making tissues, sanitary products, liner, fluting and boxes. Plants in Lebanon, USA, Egypt, Saudi Arabia. Now commissioning a new mill in Egypt.*

 **Research and Development Consultant**

 Co-ordinating diversification projects.

**Summary of Employment History** *(continued)*

**1996** 🡺 **BioRegional Development Group**

 **Hackbridge**

*BioRegional Development Group is an internationally known environmental group. Interests include building of zero energy housing (BedZed development), charcoal, lavender, hemp textiles, recycling, and small-scale exploitation of non-wood fibres in developed and developing countries (BioRegional MiniMills (UK) Limited), biodegradable plastics, etc.*

 **Non-executive Director BioRegional MiniMills (UK) Limited**

Sitting on main board.Also giving technical advice, preparing patent documentation, and reports. Company now commissioning first commercial scale chemical recovery system.

**2000 - 2004 Apsley Paper Trail**

 **Apsley, Hemel Hempstead, Hertfordshire**

 *Charity involved in conservation of the Frogmore Mill (site of the world’s first Fourdrinier paper machine), education and arts.*

 **Managing Director** of Frogmore Paper Mill

Rescued the mill from a previous bankruptcy and developed a range of new products.

 **Technical Director** of Paper Trail Project

Continued product development and carried out projects to improve the paper quality of Frogmore Mill. Converted print shop into a classroom and rebuilt paper machine wet end.

**2005 - 2006 Wolfson Centre**

 *Part of Brunel University specialising in extrusion technology.*

 **Director**

 Advising on fibre technology and participating in projects.

**2007** 🡺 **InterfaceFLOR**

 *International flooring manufacturer*

 **Consultant**

Working on ‘natural plastics’ for flooring tiles within the REFLRCT project supported by UK Government funding.

**2010**🡺 **Zelfo Technology**

 *Natural fibres research and development company*

 **Technical Director**

Developing the use of natural fibres to replace those made from non-renewable sources.

**Patents Granted**

1. **Ammonia/Oxygen Pulping Process**

 British Patent No. 32335/75 (for PIRA with R J Hamer)

1. **Low Pressure, Semi-dry Pulping of Straw**

 British Patent No. 8016290 (with Patrick A M Murray)

1. **Filler Compositions and Uses in Manufacture of Fibrous Sheet Materials**

British Patent No. 8621680; also European and USA patents (with Dr J A Gascoigne, Miss B M Clitherow and Dr B van Issum)

**Provisional Patents and Patents Applied For**

1. **Various patents connected with MiniMill**

 Including fibre preparation, pulping and chemical recovery.

1. **Use of Pin Rolls to Prepare Fibrous Raw Materials Prior for Pulping**

 (with others).

1. **Vortex Deinking of Waste Papers** (with S Blum).
2. **Special Deinking Chemicals for Waste Papers** (with S Blum).
3. **Two patents associated with Zelfo and Fibre Processing** (with others)
4. **Product Patent involving Zelfo** (with Richard Hurding)

**Publications**

1. **A Survey of Straw Pulping in Great Britain,** 1 chapter in Volume 1, 4 chapters in Volume 2 plus illustrations and diagrams for Volume 2; 1973 for PIRA
2. **Indigenous Fibre Sources** (with Miss J Calver); 1976 for PIRA
3. **Straw Consortium Report,** 3 volumes; 1978 for The Straw Consortium
4. **Straw Price and Availability;** 1977 for PIRA
5. **Non-wood Fibres,** for World Paper (September 1994)
6. **The Essential Guide to Aqueous Coating of Paper and Board**

(Including all illustrations and figures) for the Paper Industry Technical Association.

1. **The Cross and Bevan Story**

 For the British Association of Paper Historians

1. **Non-wood Pulping Technology**

 For the Apsley Paper Trail

1. **History of Buckinghamshire Paper Mills**

Under preparation for the British Association of Paper Historians/High Wycombe Society/Buckinghamshire Archaeological Society

**Training Material – text**

1. **Cross and Bevan Lecture Notes** on Fibre Sources, Pulping and Pulp Testing
2. **Filler Modification Techniques** for Turkey
3. **Bewoid Size Preparation** for Turkey and Romania
4. **Coating Technology** for Algeria
5. **Straw Pulping and Papermaking** for Syria
6. **Metering Bar Coaters** for Brazil
7. **Practical Papermaking Making** for Lebanon (Indevco)

**Training Material – Automatic PowerPoint**

(Scripts, photography, art work animation and music score)

1. **Saving the World** Environmental programme for Hertfordshire schools
2. **Learning to Last** For national Learning to Last initiative.
3. **Frogmore Mill** For employees and visitors to Apsley Paper Trail
4. **Non-Wood Fibres** For Apsley Paper Trail education programme
5. **Chemical Pulping** For Apsley Paper Trail education programme
6. **History of the Fourdrinier** For Apsley Paper Trail and an American University.
7. **History of Papermaking** For Apsley Paper Trail
8. **History of Papermaking** ForThe British Association of Paper Historians
9. **History of Paper** For The High Wycombe Society
10. **Pulping** 10 modules for Cross and Bevan
11. **Viscose Rayon** For Cross and Bevan
12. **Zelfo Technology** For 3 Commonwealth Secretariat symposia.

**Work Locations Overseas**

Romania Austria Norway Holland

Turkey Israel Finland Sweden

Hungary Syria Spain Belgium

Germany Pakistan Poland Russia

Kazakhstan Cyprus China Lebanon

**Heritage Projects**

1. **1981 - 1986**

Restoring the Cross and Bevan property in Arlesley, Edgeworth House - initial building around 1822 and re-modelled in early 1900s.

1. **1995 - 1996**

Restoring family brick and flint cottage built in 1867.

1. **2000 -2004**

Restoring the Frogmore paper machine (steam driven) and preserving buildings.

1. **2009 -**

Preserving 30 hectares of open pasture for public access and wild life preservation in my own village of Widmer End.

**Prepared by:**

**Trevor W R Dean**

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*Friday, 02 August 2013*