

## DR TYMANDRA BLEWETT-SILCOCK

**Year of birth:** 1968  
**Nationality:** British

**Education:** **PhD (Building Integrated Photovoltaics), University of Northumbria, 1999.**  
Thesis entitled: *The Visual Impacts of Renewable Energy Systems – UK Public Perception of Building Integrated Photovoltaics.*  
**MSc (Product Design), Swansea Institute, 1994.**  
Thesis entitled: *Utilising Renewable Energy – A Solar Photovoltaic Medical Refrigerator & Icepack Freezer.*  
**BSc (Hons) (Architectural Studies), Cardiff University, 1991.**  
Dissertation entitled: *The Use and Energy Efficiency of Passive Solar Systems in Earth Sheltered Design.*  
**International Baccalaureate, United World College of the Atlantic, 1988.**  
Scholarship to attend this International Sixth Form College at St Donat's Castle, South Wales – subjects including Art, Maths, Norwegian and Physics.

**Languages:** English – Fluent  
Norwegian – Conversational

**Interests:** Arts & Crafts, Photography, The Outdoors and Challenging Prejudices about People with 'Special Needs'

### KEY EXPERTISE:

- **Mum to Arwen Poppy – a perfect little girl with special needs**
- **Contact Lens and Enteral Feeding (for Children) Expertise**
- **Flexible, creative, enthusiastic, personable and not afraid to get my hands dirty**
- **With an International up-bringing and education, born in the UK and raised in Africa, I was awarded a 2 Year Scholarship to the International United World College of the Atlantic Sixth Form College, where I learnt Norwegian and developed my understanding of different cultures**
- **Exhibition Artwork Preparation and Presentation for various International venues**
- **Extensive experience of Microsoft Word, Excel, Power Point, Outlook and Publisher**
- **Welsh Business Development – A Strategy for Sustainable Development in Wales**
- **UK and European Funding Proposal Writing – winning over £\_million of Contracts**
- **European Commission Expert Evaluator – FP5 RTD Programme PV Sector Proposals & Renewable Energy SME Specific Measures**
- **Renewable Energy Project Management**
- **In-depth Renewable Energy System Interview and Post Occupancy Survey Experience**
- **I have always been fascinated by Renewable Energy Sources and how to utilise them, as can be seen from my Academic Research, and have worked at a variety of jobs in order to fund these studies**
- **Extensive Building Integrated Photovoltaics (BIPV) Experience**
- **BIPV Data Collection and Analysis**
- **Photovoltaic (PV) System Installation Experience**

## **PROFESSIONAL EXPERIENCE:**

### **2003 – present:**

#### **Director, P.O.P.S.Y. (Parents Of Partially Sighted + Blind Youngsters), Reg. Charity No: 1104560 and Proud Mum**

Set-up of this Charity – i.e. Support Group and Fund Raising Initiative to help Parents and Carers of children with special needs.

#### **Part-time Out of Hours Helpline Advisor, Cunningham Lindsey Chartered Loss Adjusters**

Providing Nationwide Incident Emergency First Response and Management to a wide range of Insurers and Blue Chip Companies.

### **2002-2003:**

#### **Director, Soltym Ltd.**

Set-up of this Consultancy working towards a solar future.

### **2000-2002:**

#### **PV Consultant / Welsh Business Development, Energy for Sustainable Development (ESD) Ltd.**

- Project Management of DTI BIPV Large-scale Field Trial (LSBIPV) funded projects at the Botanic Garden of Wales and University of Gloucestershire.
- Project Management of DTI PV Domestic Field Trial (DFT) funded projects in Nottingham, Glasgow and Newcastle.
- Project Management of 'PV City Guide' – an EC project working to increase the knowledge of PV amongst those involved in urban developments such as National Governments, Local Authorities and Project Developers and Designers.
- Project Management of 'Sunwire' – a PV façade wiring project with PV Systems (EETS) and Plus Wall.
- Welsh Business Development – A Strategy for Sustainable Development in Wales
- UK and European Funding Proposal writing (100% success-rate for LSBIPV, 50% success-rate for DFT).
- Technical input to IEA Task VII, 'PV in the Built Environment'.
- PV installation – assisting with PV System installations.
- PV module manufacturing – assisting with PV Module manufacture.
- General PV Design & Consultancy.
- General PV Project Reporting.
- PV system monitoring.
- General PV and Renewable Energy articles / publications.

### **1999-2000:**

#### **Research Associate, Centre for Research in the Built Environment, Welsh School of Architecture, Cardiff University**

- Thin Membrane Heat Pipe Solar Absorber with Fresnel Lens (Joule Craft Project) – testing, data analysis and project management.
- Energy Load Profiles: Data Collection for the Hotel, Higher Education and Leisure Centre Sectors (BRE Energy Efficiency Best Practice programme [EEBPP] Project) – data collection.
- 'Artificial Sky' and Wind Tunnel Testing – assisting with experimental procedure.

### **1994-1999:**

#### **Research Assistant, Northumbria Photovoltaics Applications Centre, University of Northumbria**

- Sustainable City – Assessment and Management of Urban Energy Demand (EPSRC Project).
- Optimisation of Photovoltaic Cladding Planning and Installation Procedures (EPSRC Project).
- Photovoltaic Information Systems for Architects [PISA] (Altener Project).
- Information Action: PV in Buildings (Altener Project).
- Newcastle Renewable Energy Resource Study (Gibb/ETSU Study).
- Northumberland Building Photovoltaic Façade, Newcastle upon Tyne – data collection and analysis.

January 2005

- Doxford International Solar Office, Sunderland – data collection and analysis.
- Photography of PV Façades, including the Northumberland Building, Newcastle upon Tyne, and the Doxford International Solar Office, Sunderland – showing installation processes, final arrays and interior views.
- NPAC Research Group Original Artwork for - Display Panels, Design of Reception Area and Stationery.
- Poster design and preparation for International Conferences and meetings including Hawaii, Venice, Berlin, Amsterdam, Barcelona, Anaheim and Florence.
- Additional photography, engineering drawing and brochure design.
- Exhibition co-ordination and presentation skills.

#### EXHIBITIONS:

- **Rome, Munich, Florence, California and UK Poster Presentations**
- **Swansea City Hall** – MSc Exhibition presenting various electronic product design projects and final specialist project – a PV Medical Refrigerator & Icepack Freezer.
- **Welsh School of Architecture in Cardiff** – BSc (Hons) Exhibition presenting various projects specialising in interior design, earth sheltering, passive solar concepts and commercial building design.
- **St. Donat's Castle, South Wales** – International Baccalaureate Exhibition – concepts in Composition Photography.

#### PROFESSIONAL ACHIEVEMENTS:

- **European Commission Expert Evaluator – FP5 RTD Programme PV Sector & Renewable Energy SME Specific Measures Proposals**  
DG TREN Brussels, January 2002  
DGTREN Brussels, April, 2002

#### INDUSTRIAL CERTIFICATES:

- **PV Module Assembly – Continued Professional Development Certificate**  
PV Systems, December 2001

#### MEMBERSHIPS:

- **PV-UK**
- **(UK) International Solar Energy Society**
- **National Assembly Sustainable Energy Group (NASEG)**

#### SELECTION OF PUBLICATIONS:

**Blewett-Silcock T.** *DTI Funded PV Domestic Field Trial Installations in Nottingham, Glasgow and Newcastle, UK.* Oral presentation at PV in Europe - from PV Technology to Energy Solutions Conference & Exhibition, Rome. 2002.

**Blewett-Silcock T & Carlton AP.** *A PV Electric Vehicle Garage Roof in Wiltshire, UK.* PV in Europe - from PV Technology to Energy Solutions Conference & Exhibition, Rome. 2002.

**Blewett-Silcock T et al.** *Solar ElectriCity Guide – Implementing and Experiencing Photovoltaics in the Urban Environment.* PV in Europe - from PV Technology to Energy Solutions Conference & Exhibition, Rome. 2002.

**Blewett-Silcock T et al.** *Solar ElectriCity Guide.* 2001.

Gutschner M, Barker M, Eising K, **Blewett-Silcock T**, Kjellsson E, Tondi G, Steemers K & Schilken P. *PV City Guide – Implementing Photovoltaics in the Urban Environment.* 17<sup>th</sup> European PV Solar Energy Conference & Exhibition, Munich. 2001.

**Blewett-Silcock T.** *Building Integrated Photovoltaics – Public Opinion.* World Renewable Energy Congress & Special Issue of Renewable Energy Journal, Brighton. 2000.

**Blewett-Silcock T.** *Public Reaction to Building Integrated Photovoltaics.* 16<sup>th</sup> European PV Solar Energy Conference & Exhibition, Glasgow. 2000. Vol. 2, Page 1852. ISBN 1 – 902916 – 18 – 2.

**Blewett-Silcock T.** *Public Perception of Building Integrated Photovoltaics.* UK-ISES Silver Jubilee Conference, Brighton. 1999. Page 255. ISBN 1 – 873640 – 28 - 5.

**Blewett-Silcock T.** *The Visual Impacts of Renewable Energy Systems – UK Public Perception of Building Integrated Photovoltaics.* 1999.

**Blewett T** & Hill R. *UK Public Perception of Building Integrated Photovoltaics.* World Renewable Energy Congress & Special Issue of Renewable Energy Journal, Florence. 1998. Vol. 3, Page 1816. ISBN 0960 – 1481/98/\$.

Pitts AC, Gyoh LE, Pearsall NM & **Blewett T.** *Modelling PV Cladding Planning and Installation Processes.* World Conference on PV Solar Energy Conversion, Vienna. 1998. Vol. 3, Page 2620. ISBN 92 – 828 – 5420 – 5.

**Blewett T,** Horne M & Hill R. *Heliodon Prediction of Shading on Building Integrated PV Systems.* IEEE PV Specialists Conference, California. 1997. Page 1395. ISBN 0 – 7803 – 3767 – 0.

Munyati E, **Blewett T** & Hill R. *The Consideration of Commercial Building Integrated PV Systems in Zimbabwe.* PV Solar Energy Conference & Exhibition, Barcelona. 1997. Vol. 2, Page 1196. ISBN 1 – 901675 – 02 – 7.

Pearsall NM, **Blewett T,** Hill R, Noble R & Shaw M. *The Northumberland Building PV Façade – Lessons Learned in Design, Installation and Performance Issues.* Eurosun'96, Freiburg. 1996. Vol. 2, Page 803.

**Blewett T.** *The Visual Impacts of Renewable Energy Systems – The Northumberland Building PV Façade, Newcastle upon Tyne.* Green Shift Symposium, Kingston Upon Thames. 1996. Page 89. ISBN 1 – 899999 – 03 – 5.

Wilshaw AR, Gonzalez NJ, **Blewett T** & Pearsall NM. *Temperature and Shading Effects on the Performance of a Building Integrated Photovoltaic Array in Newcastle upon Tyne.* 13<sup>th</sup> European PV Solar Energy Conference & Exhibition, Nice. 1995. Vol. 1, Page 664. ISBN 0 – 9521452 – 05 – 1.

**Blewett T.** *Utilising Renewable Energy – A Solar Photovoltaic Medical Refrigerator & Icepack Freezer.* 1994.

**Blewett T.** *The Use and Energy Efficiency of Passive Solar Systems in Earth Sheltered Design.* 1991.

#### REFERENCES:

The following open references are available from:

- Professor Robert Hill
- Professor John Twidell
- Professor Richard Silverman
- Mr Colin Jenkins