

# **JOHN S. MASON: Curriculum Vitae**

## **QUICK GLANCE QUALIFICATIONS:**

GCE 'O' LEVELS - (Malvern Hall School, Solihull, 1974-79): English (A), Mathematics (C), Physics (B), Chemistry (B), Biology (A), Geography (A), Literature (C).

GCE 'A' LEVELS - (Solihull Sixth Form College, 1979-81): Geology (A), Chemistry (B).

HONOURS DEGREE - (University of Wales, Aberystwyth, 1981-85): Geology (2.2).

POSTGRADUATE RESEARCH DEGREE - University of Wales, Aberystwyth: external M.Phil degree awarded 1994. Thesis: A Regional Paragenesis for the Central Wales Orefield.

Full clean Driving Licence.

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## **WORK EXPERIENCE, post Mid 1990s:**

### **1) CONSERVATION & RESEARCH: 1996-PRESENT DAY**

#### **National Museums and Galleries of Wales:**

Early 1996 saw the initiation of the MINESCAN project, for which I was taken on as a consultant responsible to Dr Richard Bevins of the Department of Geology, National Museums and Galleries of Wales, Cardiff. The work involved an initial desktop study in order to rationalise various listings of disused Welsh metal mines. Simultaneously, a set of weighted criteria was developed, against which the mineralogical/metallogenic interest of the minesites could be assessed, resulting in each site being awarded a numerical score. The scoring system was designed to determine whether the sites were of sufficient quality to be incorporated into the Mineralogy Block of the Geological Conservation Review (GCR). Set up by the Joint Nature Conservation Committee (JNCC), the GCR programme was implemented to afford sites of national geological importance statutory protection as Sites of Special Scientific Interest.

Following this initial phase of MINESCAN, I was briefed to undertake the assessments of over 1000 Welsh mine and mineral sites on a county-by-county basis. The work, financially sponsored by the Countryside Council for Wales, involved field surveys, follow-up laboratory work and database compilation with, finally, recommendations on the status of each site in terms of GCR significance. Thus, 1996 saw Dyfed & Powys mines examined, 1997 was spent in Gwynedd, 1998 in Clwyd and 1999 in Glamorgan & Gwent. The work has resulted in an unprecedented detailed regional view of metallogenesis in Wales, from which various publications are continuing to be generated. In 1999 I was also commissioned to co-author the Welsh chapter of the GCR mineralogy/ metallogenesis volume, the first draft of which was completed in March 2000. The book was finally published in the autumn of 2010. In 2006 I was made an Honorary Research Fellow of the Museum.

#### **Welsh RIGS groups:**

From 2005-2009 I worked with groups in Gwynedd, Clwyd, Pembrokeshire and Central Wales inputting site data into RIGS documentation. RIGS stands for Regionally Important Geological Sites,

which are localities of educational or research use. Part of a team of specialist geologists, the sites I covered in these areas are flagged-up for their mineralogical and/or metallogenic features. Documentation is held on a central database and is also passed on to the relevant Planning Authorities.

### **Richards, Moorehead and Laing Ltd:**

In 1997, I was commissioned to undertake a field-survey, and provide a database and report, on a number of disused metal mines in the SW Shropshire Orefield, as part of a feasibility study into their partial reclamation. The work, in the MINESCAN idiom, involved assessment and delineation of any areas of mineralogical importance at the sites specified.

### **Symonds Group:**

In 1999, I was contracted by this consultancy firm to undertake the mineralogical assessment of features exposed in a working quarry in Charnwood Forest, Leicestershire. The work involved the rope-access inspection of a 60m rock-face, collection of samples, assessment and compilation of a report. The aim of the work was to assess whether features examined in the face were of sufficient scientific interest to warrant being made accessible as part of the afteruse plan upon closure of the quarry.

### **Countryside Council for Wales:**

In 2010 I surveyed working quarries in South Wales in order to establish a practical plan to conserve features of geological importance upon their eventual closure.

### **Cardiff University:**

In 2010 and 2011 I teamed up with Cardiff University's Department of Earth Sciences to run a third-year undergraduate residential field-trip in North Wales, involving teaching of the study of ore-deposits (of which there are a great variety in the district). We will continue to develop this programme over the coming years, funding permitted.

### **Dulas Ltd:**

In 2011 I worked as a consultant to this renewable energy company on the site of a proposed windfarm at Nant-y-moch, near Aberystwyth. The work involved mapping out, documenting and photographing areas of regional and national geological importance, so that construction work, including road-building and quarrying to obtain aggregate, would avoid damage or disturbance to them.

## **2) SCIENTIFIC INTERPRETATION: 2002-PRESENT DAY**

### **Forest Enterprise:**

The possibility of a geological trail incorporating several GCR sites in Coed Y Brenin (NE of Dolgellau) was conceived some time ago. In 2002-2003 I designed and wrote the trail guide and interpretation panels: the trail officially opened in May 2004. This is I believe the first geological trail in any Forest Enterprise woodland. The trail looks at various mineral deposits related to volcanism in early Ordovician times and includes the well-known Coed Y Brenin porphyry-copper deposit, discovered by Riofinex Ltd in the 1960s. Part of the work involved excavating an exposure of the

"ore-zone" of this deposit.

## **National Museum of Wales**

In 2004-2005 I worked extensively in writing the text for the second edition of A Mineralogy of Wales - first published as a book in 1994. This heavily revised version, with lots of new data, was published not as a book but as a website within the National Museum's main website. The results of this major project may be seen at [http://www.museumwales.ac.uk/en/mineralogy\\_of\\_wales/](http://www.museumwales.ac.uk/en/mineralogy_of_wales/).

## **Spirit of the Miners:**

During 2006 and 2007 I was involved in a number of interpretation projects commissioned by Spirit of the Miners - the Ceredigion Uplands Regeneration Initiative. The initiative is managed by Ceredigion County Council and is funded by the Welsh Assembly Government, the European Objective 1 programme and the Countryside Council for Wales. My input comprised writing a bilingual colour booklet on the mines and minerals of the area, plus the design, layout and text for 6 bilingual interpretation panels, for projects involving Central Wales RIGS, Trefeurig Community Council, CADW, CCW and the Welsh Mines Preservation Trust. The panels are sited at the following mines: Cwmystwyth, Cwmsymlog, Cwmrheidol and at the remains of the Pont Ceunant Generating Station near Frongoch.

## **Centre for Alternative Technology:**

In 2011 I was commissioned to develop a presentation of the geological history of Mid-Wales for CAT's Living Landscape Festival. The show took the visitors from the formation of the Earth right through to the present day and how the Welsh landscape has evolved and why.

## **Dunedin Press**

In early 2012 I was commissioned to write a book with the working title An Introduction to Mineralogy, aimed at first-year undergraduates with no prior knowledge of the subject. This is, of course, an ongoing project.

## **3) SEVERE WEATHER/CLIMATE RESEARCH, INTERPRETATION & PHOTOGRAPHY: 2000-PRESENT DAY**

### **Wales' only severe weather/climate blog**

In the closing years of the 20th Century, I became interested in severe (particularly convective) weather - squall lines, thunderstorms, tornadoes and so on. When time is available and conditions are right I analyse online data and intercept storms armed with a camera. The results are posted on my popular Welsh weather/climate blog at [www.geologywales.co.uk/storms](http://www.geologywales.co.uk/storms). The site gets a surprising number of unique visitors - hundreds per day is by no means unusual.

## **Writing about Climate Change**

In recent years, my realisation has grown of the need for anybody who a) understands the science and can b) write coherently to add their voice to the debate about climate change - a manufactured

debate, it has to be said, but a debate nevertheless. As a result my blog has an increasingly frequent number of climate change-related posts. These give an indication of where I stand and how I approach what is a critical part of this large, complex and often poorly-understood (by the public) subject. In 2010 I became involved with the Climate Change Consortium for Wales - a partnership between Wales' universities and their climate research departments. In 2011 I was invited to join the writing team at the high-profile and award-winning climate blog Skeptical Science, where I have started to contribute pieces with an Earth Science theme.

## **The Dyfi Valley & Welsh Weather Slide-Library**

In 2007 I spent a lot of time digitising my collection of photographic slides. From the best of these (ca. 350 images) I compiled the first version of an online slide-library, navigable either by geography or by weather-type. This ongoing project offers prints (up to large format) and digital images for multimedia use. Already a very comprehensive photographic resource on the Machynlleth and Dyfi Valley area and on Welsh weather, it continues to expand steadily, assisted by the acquisition in early 2009 of a Nikon D300 DSLR. The Slide-library is at [www.geologywales.co.uk/storms/gallery](http://www.geologywales.co.uk/storms/gallery) .

## **Talks, TV and Radio**

I give regular talks on weather-photography to local groups but also further afield, including lecturing at the Royal Meteorological Society in London. I have appeared in several weather and climate-related programmes in recent years for BBC1 (including Countryfile - launching its weather photography competition), BBC Wales, ITV Wales, national and local radio.

## **TORRO**

The Tornado and Storm Research Organisation is a privately supported research body, serving the national and international public interest. Founded in 1974, data-collection, research and co-ordination is undertaken by the Directors of TORRO, supported by some 400 observers, investigators and other contributors. Most supporters are British, with a smaller number from elsewhere in Europe and across the world.

Work by all TORRO personnel - including the Staff (of which I am one) - is undertaken voluntarily. TORRO Staff are composed of professional and amateur meteorologists, with academic qualifications ranging from nothing to doctorates: the only requirements are an interest in the subject area, enthusiasm and a desire to add to the body of scientific knowledge relating to our changeable and at times spectacular climate.

## **4) INFORMATION TECHNOLOGY: 2000 ONWARDS**

During the 1990s my IT experience was pretty much Microsoft Office-based. However, in 2000 I completed a Web Design course at Cyberspace, Machynlleth's Cyber Cafe and I.T. Centre. I then worked there on a part-time basis, until it closed, and since then I have done freelance web design, with a number of local (non-geological) customers, such as [William Lloyd Williams](#), the [White Lion Hotel](#), [CAMAD](#) and so on. Although I have used Flash and similar by request, I prefer straightforward uncluttered sites which convey the information the viewer is looking for quickly and effectively, with straightforward navigation an absolute must! I am also fluent in Photoshop, Quark Xpress and other graphics/DTP software, plus presentation tools such as Powerpoint.

## **5) HISTORICAL: 1988-1995**

Field Assistant (Mineral Reconnaissance Programme, British Geological Survey, 1988-89): Regional and specific area surveys for gold, platinumoids and base metals, mainly in Scotland (Ochils, Glen

**Clova, Loch Ailsh) involving drainage, soil, deep overburden and rock sampling supplemented by geophysical surveys and diamond drilling. Additionally gained experience at BGS Keyworth in all aspects of sample preparation for analysis.**

**Project Geologist (Colby Resources Corporation of Vancouver, 1989-91): Regional and specific area surveys for gold in the Scottish Dalradian involving similar techniques to the BGS work plus liaison with estate owners and Crown agents, geological mapping, trenching of auriferous veins and the sinking of an open stope on a particularly rich vein at the Calliachar Burn prospect. Promoted to managing field geologist in 1990; corporate (& therefore field) operations ceased in late 1991.**

**General geologist (self-employed, 1991-95): Based in Central Wales and undertaking a variety of contracts, including rock face demolition & stabilisation (Constitution Hill, Aberystwyth, for Posford Duvivier Ltd, Welshpool Quarry for Richards Moorehead & Laing Ltd); minesite surveys (for Richards, Moorehead & Laing Ltd); emergency dewatering of mineworkings and underground drainage maintenance (National Rivers Authority Welsh Region); exploration for baryte at Cothercott, SW Shropshire (Colin Stewart Minchem Ltd); shotfiring & rock blasting for seismic surveys, farm roads, foundations etc (SJS Hughes Mining Services); archival geological research of planned windfarm sites (Dulas Engineering Ltd).**