

BIOGRAPHIC NOTE ON THE LEAD APPLICANT

Stuart Anderson is a retired Principal in General Practice for the Towyn & Kinmel Bay area, most severely affected by the 1990 North Wales Coastal Flood Disaster. This event, seen then as a harbinger of things to come with climate change, involved the collapse of the British Rail-owned sea wall during a storm surge. Miraculously there was no direct loss of life, although 5,000 people had to be evacuated for up to a year, and people he knew as patients undoubtedly died of stress in the aftermath.

Election as a member for Conwy County Borough Council in 1999 came through already being a keen advocate for floodplain development policies, and a volunteer in SUSTRANS-related activities. In May 2008 he was elected to chair Conwy's new Partnerships Overview & Scrutiny Committee, and has endeavoured to use this position creatively, not least for the cause he has espoused as being vital for the future of North Wales and elsewhere – coastal regeneration through climate change adaptation and appropriate deployment of renewable energy.

Stuart went to school at the home of the Welsh national game but believes that the anonymous person who first passed the ball on to someone else probably deserves more credit than William Webb Ellis. He was being groomed to follow his father into engineering but switched at age 17 after taking the Cambridge MSQE, instead qualifying in medicine from St Andrews University in 1972. He later took a Diploma in Tropical Medicine and Hygiene and passed the Membership of Royal College of Physicians examination. During postgraduate personal development he took an interest in developments in medical and social statistics.

Stuart's background interest in renewable energy goes back to the mid-1970's fuel crisis, when he helped serve the needs of a pair of rural mission hospitals in central Zaire as a volunteer in mission, using his spare time to lead the purchase and installation of a small hydro-electric turbine that had become essential for everyday work. This background was the basis for his more recent interest in the tidal energy theme, when he befriended and tried to help the American businessman Peter Ullman when in 2000 he first introduced ideas for a tidal impoundment off the North Wales coast.

More recently Stuart has reviewed the La Rance barrage scheme in a novel way, having completed an article under current consideration for publication by CIWEM's Journal of Water and the Environment. The terminology he put forward of Tidal Energy Storage And Release (TESAR) has already been adopted by the Institution of Civil Engineers. In this review work Stuart's medical research background came in surprisingly useful since the basic principle involved was remarkably similar to that needed in a 3-year programme developing a new dynamic assay for the intracellular energy-related vitamin thiamine.

In the mid-1980's this research had led to full-length publications in the Quarterly Journal of Medicine, Annals of Clinical Biochemistry and Lancet – the latter being a 'first ever' for the local District Hospital. The story is of particular interest since thiamine has such a crucial role in the energy metabolism of the human body. Hence it so happens that Stuart's energy-related studies have spanned the full range from molecular to planetary!

Stuart's interests in second world war strategy and cross-cultural exchange he ascribes to having been born in 1946, the year after his father William's return from Colditz - probably the 20th century's most famous international escape school. With this background Stuart feels strongly that the word 'strategy' has become divorced from its original survival-related meaning - which if followed might help focus attention on the paramount need for government and 'sustainable development' quangos to seek out competitions for the best ideas to help social and environmental betterment, rather than meekly follow abstract committee processes that stifle vitally needed innovation and community engagement.

In the mid-1960's Stuart was a viola-player in the National Youth Orchestra of Great Britain, to end up leading the second desk and being recommended for professional training by Fred Riddle (then lead violist for the Royal Philharmonic). He toured Israel and Greece under Rudolf Schwarz - a survivor of Auschwitz and a notable advocate for reconciliation between Israel and post-war Germany. He was lead tenor in the Cathedral Choir at St Andrews, and continues a broad and active interest in music - recently helping to bring John Huw Davies' Summer School to Saxony, where it performed in Leipzig and Dresden in 2008 and 2009..

He is currently exploring possibilities with the British Council for a sustainable cultural exchange programme between North Wales and Saxony based on the arts and offering North Wales' well established music festivals, in particular Llangollen with its emphasis on the involvement of young people, to help Colditz get its new music academy fully established.

Biographic notes for IMarEST articles (3)

THIRD PAPER

Boyhood fascination with how the Fairey Gannet (a chubby-looking naval search-and-destroy aircraft that had a pair of counter-rotating propellers on its nose) ever got airborne might have triggered something, but otherwise Stuart Anderson admits he has no qualifications whatever to suggest that bulb turbines should be mounted in the way suggested in this article other than that of being a life-long 'ideas person'. For example in 1967, when working in a summer survey crew on the Churchill Falls Hydro-Electric Project in Labrador he wrote up, on two pieces of A4 paper, a way of building diversionary tunnels for dam projects so that they could be more securely closed off using the siphon principle. Bechtel's management were suitably impressed, on the spot offering him an engineering scholarship which wisely or unwisely he turned down to continue medical studies. Stuart takes encouragement from the fact that the Phoenix floating caissons - from which present plans for the Severn Barrage come via their improvised post-war usage to plug the gap in a bombed-out Dutch polder - were the brainchild of the amateur engineer Winston Churchill who, having jotted a sketch down and sent it to the War Dept for development, saw the idea put into use barely two years later in the D-Day Mulberry Harbours. Thus, while figuratively speaking the previous two articles takes the reader on from Dunkirk to the Battle of Britain, this third and final one in the series is offered as an idea that might make towards a potentially key stage in preparation of an outline UK strategic route-map for appropriately backed, researched, resourced and equipped engagement with the climate change struggle to extend much further forwards, towards the vitally needed prospect of ultimate success.