

**Professor Arnold William Hendry**  
**10<sup>th</sup> September 1921 - 14<sup>th</sup> December 2013**

Professor Arnold W. Hendry was one of the most eminent Structural Engineers of the 20<sup>th</sup> century – focusing latterly on Structural Masonry.

His core skills were classical mathematical analysis, detailed and carefully executed laboratory tests and very large scale experiments in Torphin quarry – combined with a quick mind that enabled him to absorb a huge amount of detail and draw understandable and forward looking conclusions. This was combined with his ability to turn inspirational research into world leading publications – very rapidly. People queried – how did he do it!

Born in 1921, Arnold William Hendry was educated at Buckie High School in the North East of Scotland before attending Aberdeen University, from where he graduated BSc, PhD and DSc.

After graduating BSc, Hendry worked for Sir William Arrol & Co, Glasgow (1941-43) – then he held appointments in 5 universities.

At the University of Aberdeen, where he was a Lecturer from 1943-49, he published his first book: Elements of Experimental Stress Analysis, Arnold W Hendry,

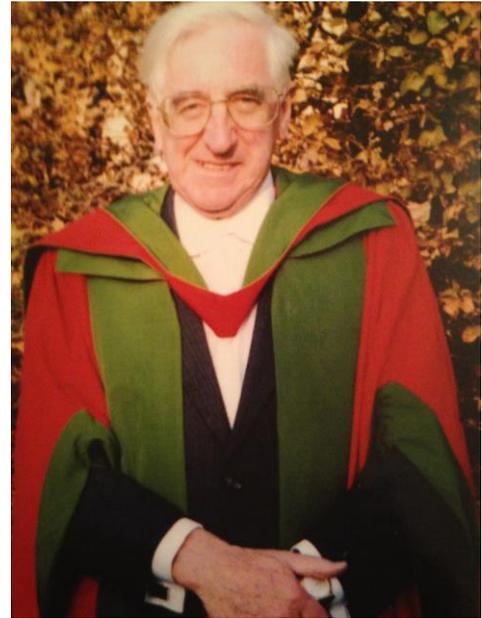
As a result of this publication, Hendry was appointed as a Reader in Civil Engineering at Kings College London in 1949 at the age of 28. This was a huge achievement. By the time he was 30 years, Hendry accepted the challenge of appointment as the Foundation Chair of Civil Engineering at the University of Khartoum; taking on the role of Dean of Engineering (1951-57). Many would have found this set of challenges fulfilling, particularly with a young family, but the young Hendry saw this as an opportunity where one started “the day job” at around 05.00 a.m. finishing around mid-day as the heat precluded office work. Arnold rejoiced in the opportunity then created to undertake another day’s work on his research...! Working with a young lecturer, Leslie Jaeger, Hendry focused on the analysis of steel bridge deck grillages and his second book was published: The Analysis of Grid Frameworks and Related Structures, Arnold W Hendry & Leslie G Jaeger. This work led to the successful award of a PhD to Leslie Jaeger from the University of London. Jaeger went on to hold the Regius Chair of Engineering in Edinburgh and then a Chair at McGill University

Much later, Arnold Hendry was awarded an Honorary Doctorate Degree from the University of Khartoum for his efforts in establishing the Faculty of Engineering at the University.

At the age of 36 yrs, Hendry then took on the challenge of creating a new Department of Building Science at the University of Liverpool (1957-63) – pulling together a multi-disciplinary team of civil engineers, an architect and a building physicist.

From Liverpool, one of the Russell Group of top UK universities, Hendry returned back home to Scotland to the foundation chair of Civil Engineering in 1964 at The University of Edinburgh (also Russell Group and now no. 17 in the world) . His challenge in Edinburgh was to create a Department of Civil Engineering and Building Science, and then create a School of the Built Environment encompassing his own Department plus Architecture (led by Sir Robert Matthew of RMJM fame) along with Urban Design (led by Prof Percy Johnson-Marshall) and Geography (led by Prof James Wreford Watson). When industrial practice in the 1980s dictated change, Hendry became the first Chairman of the newly formed embryonic School of Engineering.

Throughout all these achievements, Arnold Hendry was a gifted structural engineer who had an international vision and so from the mid-1960s at The University of Edinburgh he focused his skills on developing a rigorous understanding of Structural Masonry. From Edinburgh flowed another series of landmark research and practice textbooks including:



- Design of Masonry Structures [Paperback], A.W. Hendry, B.P. Sinha, S.R. Davies
- Reinforced and Prestressed Masonry (Concrete Design and Construction Series) by Arnold W. Hendry
- Structural Masonry by Arnold W. Hendry

Overall Hendry was the author of eight major academic works along with over 150 papers.

Hendry was elected to Scotland's National Academy of Science and Letters - Fellow of the Royal Society of Edinburgh in 1961 (aged 40 yrs).

Arnold Hendry retired from his Chair & Headship at the UoE in 1988 (aged 67 yrs) to become Professor Emeritus. He continued with his research, still publishing, chairing an international Rilem Committee and acting as consultant to the structure of the Cathedral at Kirkwall on the Orkney Islands.

He was awarded Honorary Membership of The Masonry Society of America (TMS) - the highest honour that the TMS can bestow on a member. Later, in recognition of his exceptional research work related to masonry, he was awarded the John B. Scalzi Research Award by the TMS in 1994 (now aged 83 yrs).

One of the measures of a great academic leader, such as Professor Arnold Hendry, is the success of his protégés. There are many examples ranging from his PhD student in Khartoum in the 1950's, Les Jaeger, who went on to hold the Regius Chair of Engineering at the University of Edinburgh and later the Chair of Civil Engineering and Applied Mechanics at McGill University, Canada – through to his Staff in Liverpool in the 1960s. Dr Barry Wilson was promoted to a Chair of Building Physics and then Senior Vice Principal of the University of Edinburgh; Braj Sinha who was promoted to a Personal Chair of Structural Engineering, also at the University of Edinburgh. Hendry's many sabbatical visitors used their stay in Edinburgh as a career stepping stone – James Colville was promoted to a Chair and then Dean at the University of Maryland, USA; Adrian Page to a Chair at the University of Newcastle, Australia; Garry Suter to a Chair at Carlton University, Ottawa; then "Wijey" a PhD student and then Lecturer in Edinburgh who went on to become Vice Chancellor, University of Moratuwa and also of the Open University of Sri Lanka. Professor Dayantha Wijeyesekera ("Wijey") is now Chancellor, University of Vocational Technology, Sri Lanka.

"Before the current controversy regarding the cost escalation of the now new tram routes in Edinburgh, Hendry was deeply involved in the 1970's to 1990's controversy over whether to build major highways in the city or another form of tram. He was the President of the Scottish Association for Public Transport (SAPT) and an active member of the Cockburn Association. During this period, Hendry published a book, locally, entitled: "The Edinburgh Tram Saga" in 2002. His willingness to devote time to local conservation issues was much appreciated by the Cockburn Association, led at the time by Oliver Barratt."

Professor Arnold William Hendry died peacefully on Saturday 14 December 2013, aged 92 years. Arnold Hendry was husband of the late Sheila and Elsa, father of Margaret (now a retired dental surgeon of Southport) and two sons the late George and Eric, grandfather to two grandsons and two granddaughters and a great grandfather.

**Contributed by: Professor Mike Forde,  
PhD, FEng, FRSE, FAcI, CEng, FICE, FIET  
Carillion Professor of Civil Engineering Construction  
University of Edinburgh**

**Professor Arnold William Hendry, BSc, PhD, DSc, FICE, FIStructE, FRSE. Born 10 September 1921. Elected FRSE 1961. Died 14 December 2013**