

## William Menelaus Memorial Lecturers

1927	<b>Sir William H Bragg</b> KBE FRS DSc	1995	<b>Sir Keith Stuart</b> MA FRSA CBIM FCIT
1928	H.C.H. Carpenter FRS MA PhD Hon DSc(Wales)	1997	Sir Robert May FRS
1929	<b>W.H. Hatfield DSc FRS</b>	1999	<b>Dr. Elizabeth Haywood CIMgt FRSA</b>
1930	H.G.A. Hickling DSc FRS	2001	Dr. David Grant CBE FEng
1931	<b>F.S. Sinnatt CB DSc</b>	2003	<b>Sir Peter Williams CBE FEng FRS</b>
1932	J.W. Cobb CBE BSc FIC	2004	Sir Alec (now Lord) Broers FEng FRS
1933	<b>C.A. Edwards DSc FRS</b>	2005	<b>Sir David Davies FEng FRS</b>
1934	C.H. Desch DSc FRS	2006	Sir Gareth Roberts FEng FRS
1935	<b>W.T. David MA ScD DSc MInstCE</b>	2007	<b>Sir John Chisholm FEng FRS</b>
1936	B.P. Haigh MBE DSc MInstCE	2008	Sir Richard Friend FEng FRS
1937	<b>C.H. Lander</b> CBE DSc MInstCE	2009	<b>Lord Browne of Madingley</b> FEng FRS
1938	W.M. Thornton OBE DSc DEng	2010	Prof Dame Ann Dowling FEng FRS
1940	<b>Sir Arthur P.M. Bleming CBE</b> DEng MSc(Tech) MIMechE MIEE	2011	<b>Prof. Dame Julia Higgins</b> DBE FRS FEng
1945	Sir Lewis L. Fermor OBE DSc FRS	2012	Prof. The Lord Rees of Ludlow OM FRS FEng
1946	<b>C.G. Morley MIEE</b>	2013	<b>Sir John Cadogan CBE</b> DSc FRSE FRSC PLSW FRS
1947	Douglas Hay MC BSc MInstCE	2014	Sir John Armit CBE FEng FICE
1948	<b>P.B. Moon MA PhD FRS</b>	2015	<b>Prof Hywel Thomas FEng MAE</b> FLSW FRS
1949	W F Cartwright DL MIMinE	2016	Sir Emyr Jones Parry GCMG FInstP PLSW
1952	<b>W. Idris Jones CBE</b> BSc PhD MIMinE MICHemE FRIC	2017	<b>Prof Dame Jocelyn Bell Burnell</b> CBE FRS FRAS PRSE PPIoP PPRAS
1954	Sir William Halcrow MInstCE	2018	Sir John O'Reilly DSc FEng FLSW FIET
1957	<b>Sir Charles F. Goodeve</b> OBE DSc FRS	2019	<b>Prof Lord Robert Mair</b> CBE FEng FRS FICE
1960	T.E. Allibone PhD DSc FRS MIEE		
1963	<b>Sir Willis Jackson DSc MIEE FRS</b>		
1965	Sir Humphrey Browne CBE MA MIMinE		
1967	<b>Sir William Penney</b> KBE FRS MA PhD DSc		
1970	Sir Paul Chambers KBE DB CIE		
1971	<b>Lord Pilkington</b>		
1973	Dr. K. Mallanby CBE DSc FIBiol		
1976	<b>Sir Kingsley Dunham FRS</b>		
1977	Sir Derek Ezra		
1979	<b>Dr. Walter Marshall CBE FRS</b>		
1981	Sir Joseph Pope DSc (Hon) LLtd FBIM CEng FIMechE		
1983	<b>Sir Peter Gadsden</b> CBE MA DSc FEng		
1985	Lord Caldecott		
1987	<b>Prof. J. Notting</b>		
1989	Colin Kirkland		
1991	<b>G. Adler OBE</b>		
1993	Dr. Hugh Scott-Russell CEng FSAIMM		

## The South Wales Institute of Engineers Educational Trust

Chairman:  
**Mr Phillip E. Hourahine**



## The 57<sup>th</sup> William Menelaus Memorial Lecture

In Association with  
**The Learned Society for Wales and**  
Supported by **Cardiff University**

## “Astronomy and Poetry”

Presented by:  
**Professor Dame Jocelyn Bell Burnell**

Visiting Professor, Astrophysics, University of Oxford  
President of the Royal Society of Edinburgh

6.00pm, Monday 20th March, 2017  
In the **Large Shandon Theatre**,  
**Main Buildings, Cathays Park, Cardiff**

## The 57<sup>th</sup> William Menelaus Memorial Lecture



Jocelyn Bell Burnell is currently a Visiting Professor of Physics in Oxford University and a Pro-Chancellor at Trinity College Dublin.

She has been a Dean of Science and was for ten years Professor of Physics at the Open University, and had a wonderful year as a Distinguished Visiting Professor at Princeton University. She read a Physics degree at Glasgow University. This was followed by a PhD in Cambridge (UK) in Radio Astronomy.

During her time there she discovered the first four pulsars, opening up a new branch of astrophysics - work which was recognised by the award of a Nobel Prize to her supervisor.

She worked subsequently in astronomy at many wavelengths and in many roles, for much of this period working part-time while raising a family. She has used telescopes flown on high-altitude balloons, launched on rockets and carried on satellites, and built a radio telescope which was firmly grounded in Cambridgeshire.

Later in her career she could be found in Hawaii panting for breath at 14000' and using the UK's infrared or millimetre waveband telescopes.

She has won many prestigious prizes from learned bodies in the UK and US, including a Royal Medal from the Royal Society (London) and universities there have conferred honorary doctorates on her. She is now a Fellow of several Academies, including the Royal Society, and the US National Academy of Sciences.

Her appointment to the Open University doubled the number of female professors of physics in the UK! She has been President of the Royal Astronomical Society and was the first female President of the UK's Institute of Physics. She is now the first female President of the Royal Society of Edinburgh, Scotland's National Academy.

The public appreciation and understanding of science have always been important to her, and she is much in demand as a speaker and broadcaster. She hopes that her presence as a senior woman in science will encourage more women to consider a career in science.

## The South Wales Institute of Engineers Educational Trust (SWIET2007)

The Institute was founded in 1857 and granted a Royal Charter of Incorporation in 1881. It devotes itself **“to the encouragement and advancement of Engineering Science and Practice”**, and was **“established to facilitate the exchange of information and ideas amongst its members, and to place on record the results of experience”**. In carrying out these functions, the Institute played its part in advancing technical knowledge and, through its individual members, has made important research contributions in many fields, through to 2007.

In 2007, the Institute agreed to wind up its Learned Society functions, and to transfer all its funds into an Educational Trust, devoted to the promotion of engineering with young people. The Trust has agreed to continue with the Menelaus Lecture and Dinner as part of its activities.

The Institute now makes Bursary, merit and other awards, to both individual engineering students and educational establishments, supports activities which encourage and develop young engineers, and focuses upon “youth into engineering”, in schools, colleges and other establishments, at profession “entry” levels.

### The Learned Society of Wales (LSW)

The Learned Society of Wales is Wales's first national scholarly academy. It was established and launched in May 2010. It now has more than three and fifty Fellows, who are prominent figures within their respective academic disciplines. The Society's guiding ethos is *Celebrating Scholarship and Serving the Nation*: as well as to celebrate, recognise, safeguard and encourage excellence in every one of the scholarly disciplines, its purpose is also:

- to promote the advancement of learning and scholarship and the dissemination and application of the results of academic enquiry and research; and
- to act as a source of independent and expert scholarly advice and comment on matters affecting the wellbeing of Wales and its people and to advance public discussion and interaction on matters of national and international importance.

The Society's *Strategic Aim* is to be a sustainable organisation that is fit for purpose and that is acknowledged both as the recognised representative of the world of Welsh learning internationally and as a source of authoritative, scholarly and critical comment and advice to the National Assembly and other bodies on policy issues affecting Wales.

The Learned Society of Wales is keen to develop established links with organisations like SWIET2007 that have complementary aims and is particularly pleased to be associated with this evening's Menelaus Lecture by its current President.

Denys Morgan, Chief Executive, SWIET2007, Tel: 01792 879409