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The Presidents of the Institute of Wood Science

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Abstract

The Institute of Wood Science (IWSc) represented the interests and knowledge of wood scientists and wood technologists in the UK and beyond between 1955 and 2009 when it merged with the Institute of Materials, Minerals and Mining (IOM3). In that time 27 presidents served, from industry or academia, leading the IWSc and guiding decisions relating to education, communication and the award of professional qualifications. The broad history of the Institute has been documented in 30th- and 50th-anniversary reviews published in the IWSc Journal. However, the contribution of the presidents to the success of the institute, as well as their reputations in wood science, wood technology or industry, has not been recorded. Approaching the 70th anniversary of what is now the Wood Technology Group of IOM3, this paper reviews the circumstances under which the IWSc was created and examines the contribution of each of the presidents to the health and success of the institute.

Keywords

Presidents, Institute of Wood Science, biographical information, education, research

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Introduction – a brief history of wood science research

The Institute of Wood Science (IWSc) was formed in 1955 to represent the interests and knowledge of wood scientists and wood technologists. It continued to do this, in the UK and beyond, until 2009, when it merged with the Institute of Materials, Minerals and Mining (IOM3). A president was in general elected every two years from industry or academia to lead the IWSc and to guide policy decisions made at the board level relating to education, communication and the award of professional qualifications. This led to the sustained delivery of the widely respected IWSc qualifications, maintaining competence at all levels and across the wide range of wood processing industries.

Wood Science, like the timber trade, has long been international and a recent paper by Mai et al.[1] presents a review of the history of wood science research, listing the formation of wood research institutes in several countries in the first half of the 20th century. The first, in 1906, was the Forest Products Research Institute at Dehradun, India. National institutes quickly followed in the USA (Forest Products Laboratory in Madison, Wisconsin) in 1910; Germany (Institute of Wood and Pulp Chemistry Eberswalde) in 1913; central Canada (Forest Products Laboratory Montreal) in 1913; western Canada (Forest Products Laboratory, Vancouver) in 1918; Australia (Forest Products Laboratory, Melbourne) in 1919; and in 1928 the UK (Forest Products Laboratory, Princes Risborough).[2]

Key organisations in the UK have a shared history. In 1920, the UK Department of Scientific and Industrial Research (DSIR) established a Building Research Board and on their recommendation, the government-funded Building Research Station (BRS) was created in 1921, originally in Acton but moving to Garston, near Watford in 1925. A Forest Products Research Board (FPRB) was set up by DSIR and in 1928 the Forest Products Research Laboratory (FPRL) opened at Princes Risborough in Buckinghamshire. The first director was Sir Ralph Pearson. Rendle[3] prepared a short history of FPRL.

FPRL was concerned with all aspects of timber testing and utilisation, prevention of insect attacks and fungal decay. An extensive library of books and journals was built up over the years together with an impressive library of wood samples and panels. In 1958, the FPRB was closed and some of its work at FPRL was transferred to the Timber Development Association (TDA), which had been formed in 1934 and was later to become the Timber Research and Development

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Association (TRADA) based at Hughenden Valley, near High Wycombe.[4] In 1972, the FPRL was merged with the BRS and subsequently renamed the Building Research Establishment (BRE). FPRL staff and facilities were moved to BRE in 1988 and the Princes Risborough site was closed. Many staff at FPRL and TRADA were associated with the IWSc, which had a complementary role, as a professional body for all those involved in wood, from the trade through to civil servants and university academics.

The early days of the IWSc

In his paper on the first 30 years of the IWSc, Eades[5] describes the situation after the Second World War when returning young men were keen to reignite or pursue new careers in the timber industries. There was a thirst for education and a consequent requirement for training in the form of evening classes delivered from 1945 onwards across the UK. By 1947 centres in London, Birmingham, Liverpool, Hull, Scotland and elsewhere were running 53 courses attended by 1781 students. By 1951 there were 1052 students in the first-year cohort, 525 in the second year and 334 in the third year. In 1948, the TDA offered an examination for a certificate qualification followed in 1950 by a higher certificate qualification. As a result, it became clear that the formation of a professional institute offering qualifications in wood science and technology was desirable. Eades records that leading members of the timber industries were signatories to a Memorandum of 30 November 1955 creating the IWSc and Bryan Latham became the first president.

The inaugural address of the IWSc was given by Frank W Jane, chair of botany at the Royal Holloway College, London in January 1957.[6] He summarised the development of the field since ancient times, marking the development of its 'second era' by the rapid pace of development during the First World War. The subsequent 'organised and coordinated expansion of knowledge of wood and the dissemination of that knowledge to the trades and crafts concerned with the distribution of wood' was a result, in part, of new educational schemes with technical colleges. Jane postulated that future historians would judge the third era to have arrived by the 1950s.

A detailed review of the first 50 years of the IWSc, including the first 30 years reviewed by Eades,[5] was prepared by Brazier.[7] He quotes the Institute's Memorandum of Association: 'to advance public education in the study of wood and allied subjects in furtherance of the advancement of technical, scientific, practical and general knowledge in the subject'. He comments that strong drivers for setting up the institute were the tremendous variety of imported timbers in the post-war period and the necessity of making economies in the use of timber. It was therefore essential to understand the structure and properties of these timbers through the application of wood science. Furthermore, new environmental legislation and the introduction of new wood composite products signalled the need for a more scientific and technical approach to timber usage. Brazier emphasised the significance of the IWSc in providing educational courses and communicating wood science via regional branches, an annual conference and the publication of a journal. The first issue of the *Journal of the Institute of Wood Science* (*JIWSc*) was published in 1958[8] with a version of Jane's inaugural address as its first article.[9] It became the *International Wood Products Journal* in 2010. Professional qualifications and membership grades were established based on examination results or professional achievements. Brazier's paper makes a detailed and compelling survey of courses and examinations, meetings, publications, membership statistics and management structure in the first 50 years of the IWSc.

The rest of this paper examines the role of the IWSc presidents, recording their background, contributions to the Institute and selected published work.

The IWSc presidents

The presidents of the IWSc are listed in Table 1 in date order. Photographs of the presidents are presented in Figure 1, also in date order. Following the merger with the IOM3, IWSc became the Wood Technology Society (WTS) of IOM3, and in 2021 was rebranded as the IOM3 Wood Technology Group. The chairs of the board from this era are also shown in Table 1.

Edward Bryan Latham CBE, 1955–1958

Edward Bryan Latham was, in his time, a significant leader in the timber trade and he was one of several leading members of the timber trade who recognised the importance of education and training leading to professional qualifications. He was the founder president of the IWSc, following the Incorporation of the IWSc as a Company Limited by Guarantee in December 1955. As president, Bryan oversaw the publication of the first IWSc Journal (now the *International Wood Products Journal*).

Latham was first and foremost, the chairman of James Latham Ltd. Among his other illustrious roles were chairman of the TDA (1943–1945), president of the Timber Trade Federation (TTF; 1945–1947), Forestry Commissioner (1957–1963) and chairman of the Commonwealth Forestry Association. He was the author of several books including 'Timber: Its development and distribution: A historical survey',[10] 'Wood from forest to man'[11] and 'History of the Timber Trade Federation of the United Kingdom: The first seventy years'.[12] Journal papers include Latham[13] on softwood grading and Latham[4] on the history of TDA and TRADA.

Bryan was a regular contributor to the *Timber Trades Journal* and Encyclopaedia Britannica. He had a distinguished First World War service, enlisting at the age of 19 with the London Rifle Regiment and seeing action in France and the Middle East. He was awarded the Military Medal for 'acts of gallantry and devotion to duty under fire' in battle on land which today is the Military Cross. He was appointed CBE in 1964. Bryan later studied at The Open University. At that time, he was the oldest person to complete a degree course at The Open University.

Henry A Cox, 1958–1960

Prior to the First World War, Henry was a school teacher and during the war, he served with the Royal Artillery. Following the end of the war, Henry joined the School of Forestry at Cambridge and he was later appointed to the staff at the FPRL, Princes Risborough.[14] He conducted much of the

Table 1. Presidents of the IWSc (1955–2009) and the WTS/WTG (2009 to date).

Presidents of the IWSc	
E. Bryan Latham	1955–1958
Henry A Cox	1958–1960
Edward H B Boulton	1960–1962
Walter P K Findlay	1962–1964
Rodney R Perry	1964–1966
Bernard Eades	1966–1968
J C Walton	1968–1970
George Garlick	1970–1971
John F Levy	1971–1973
David S Belford	1973–1975
Felix S Palmer	1975–1977
Christopher G Latham	1977–1979
Donald J B White	1979–1981
Christopher C Lorenzen	1981–1983
Geoffrey K Elliott	1983–1984
Terence Mallinson	1984–1986
Jean Taylor	1986–1988
John Brazier	1988–1990
Richard Venables	1990–1992
Keith Purcell	1992–1994
Martin P Ansell	1994–1996
Peter Latham	1996–1998
Richard Murphy	1998–2000
Geoff Bagnall	2000–2002
Jim Coulson	2002–2004
Vic Kearley	2004–2006
Geoff Taylor	2006–2009
Chairs of the WTS and WTG of IOM3	
Charles Trevor	2009–2011
Andrew Pitman	2011–2013
Andrew True	2013–2016
John Park	2016–2019
Graham Ormondroyd	2019–2022
Morwenna Spear	2022–present

IWSc: Institute of Wood Science; WTS: Wood Technology Society; WTG: Wood Technology Group; IOM3: Institute of Materials, Minerals and Mining.

preliminary work on empire timbers,[15] and later dealt with external relations at FPRL. On retirement from FPRL, he was from 1948 to 1951 secretary of the British Wood Preserving Association (BWPA), and from 1952, he maintained a close liaison with the Association as a technical advisor and consultant. In the immediate years after the Second World War, he played a major role in the training of instructors for the TDA (later to become TRADA) courses and lectured for many years on courses held at Cambridge University. With contemporary colleagues, such as Professor Frank Jane and E H B Boulton, he was instrumental in formalising qualifications in timber technology, for which he was an official examiner.

Edward H B Boulton, MC, MA, 1960–1962

Edward Henry Brooke Boulton had an illustrious career. He was a lecturer in Forestry at the University of Cambridge, then head of the Timber Section at the City of London College. He then became technical director at the fledgling TDA (later to become TRADA). He was the author of 'A pocket book of British trees' and co-authored with B Alwyn Jay 'British timbers their properties, uses and identification'.[16,17] For the TDA, in 1938, he wrote a dictionary of wood, amongst other booklets on timber. For Country Life Magazine, he edited, in 1937, 'Timber buildings for the country'. In a paper in the Commonwealth Forestry Review,[18] Boulton is credited with setting up the IWSc.

Walter P K Findlay, 1962–1964

Walter Philip Kennedy Findlay (1904–1985) was a professional mycologist who graduated from the University of London with an MSc in 1932 and a Doctorate of Science (DSc) in 1942. He was employed by FPRL in Princes Risborough in 1927 and was the author of many books and research papers. From 1958 until his retirement in 1969, he was assistant director of the Brewing Industry Research Foundation (BIRF) in Nutfield, Surrey. As well as his time as the president of the IWSc, he was president (1949–1950) and an honorary member (1983) of the British Mycological Society.

Findlay's published work is extensive and varied. An early paper[19] is concerned with the decay of Empire timbers. He was co-author of the book 'Decay of timber and its prevention' with KStG Cartwright, a colleague at FPRL.[20] Findlay was the sole author of the monograph 'Timber pests and diseases',[21] which describes the principal pests and diseases of standing trees and wood in storage and use, their economic significance and prevention. Preservation of timber in the tropics was addressed in Findlay.[22] During his time in the BIRF, he was the author of a paper on timber used by brewers.[23]

Rodney R Perry, 1964–1966

In 1961, Rodney R Perry was chairman of the TDA and he gave an excellent presentation[24] to the Royal Society of Arts on the broad subject of the timber industry, considering home and overseas imported timber. At the time, he was also director of a timber company and was a student with the TDA in his earlier days. The state of the timber industry at the time is well expressed in the paper and the ensuing question and answer session. He gave an estimate of the total expenditure on research and development in the timber trade, timber manufacturing and timber-using industries, including the FPRL and the Forestry Commission, the Furniture Development Council, the Printing, Packaging and Allied Trades Research Association and the TDA as being less than £350,000 per annum, or about 0.05% of the total value of manufactured or assembled wood goods.

In an obituary in the *JIWSc* Perry was praised for expanding the membership of the IWSc whilst president and strengthening the bond between branches and headquarters. He hoped that in future the professional status of timber technologists was recognised and that through technical knowledge a director manager or employee of a timber company could play a more active part in the marketing of timber.

Bernard Eades, 1966–1969

The contribution of Bernard Eades to the formation of the IWSc has already been mentioned.[5] At the time of his death

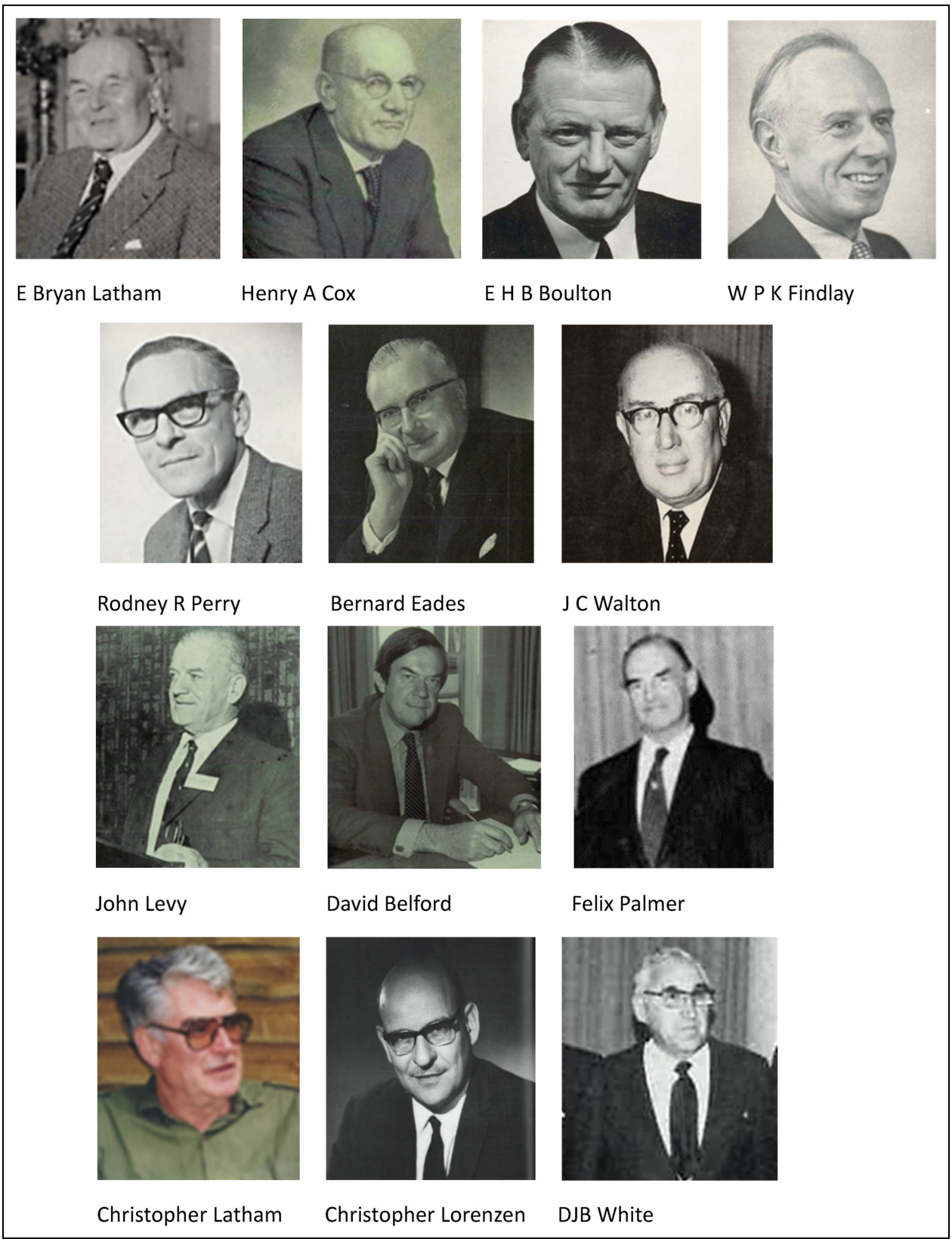

Figure 1. Photographs of the presidents of the Institute of Wood Science (IWSc) in date order. (continued)

in 1989, Annette Prees, Joseph Anthony and John Levy prepared an obituary for the *Journal of the Institute of Wood Science*.[25] Eades was born in 1906 and after leaving school he qualified as a chartered surveyor. In 1926, he joined Timberies in Oozell Street, Birmingham and 10 years on he became a director. In 1946, he joined VA Luck, became a director and formed it into a limited company. Between 1948 and 1965, he became a timber consultant advising on preservation

Figure 1. Continued.

and structural problems, mainly in stately homes. Bernard was only the ninth candidate to obtain his higher certificate from the TDA. He lectured at night school and in 1957, he was made a fellow of the IWSc and in 1966 became president. He was chairman of the Education Committee of the IWSc for more than 20 years and a strong advocate for IWSc courses within the timber industry. He was a founder member of the Midland Wood Society. In 1974, he became president of the BWPA. A brief review of a paper[26] on water repellency in timber was presented at the 1964 Convention of the BWPA.

J C Walton, 1968–1970

J C Walton was honorary treasurer of the IWSc from 1958 up until the time he became president in 1968. In February 1970, Walton wrote the editorial for the April edition of the *JIWSc*. He commented that on the recommendation of the Publication Panel of IWSc, no further editions of Wood Science News would appear, and any news formerly included in the Newsletter would now be incorporated into the Journal. His photograph appeared in the Journal in 1969. Other than this information, to date no further record of Walton's career has been found.

George Garlick, 1970–1971

Following his election as president of the IWSc in 1970, George Garlick had the great misfortune to be killed in a road accident in January 1971. At the time he was joint managing director of Parker, Kislingbury & Co. Ltd. He was born in London in 1910 and was employed by John Bland & Co. Ltd, in Cardiff, in 1925. After three years, he joined Tailby & Co. Ltd in Birmingham where after 30 years he became an executive director. The company was taken over by Dolton Bourn and Dolton Ltd and merged with Thomas Cox and Son and employed as manager. Returning to Parker, Kislingbury & Co. Ltd, he was appointed as a director in 1961 and in 1968 became joint managing director with the chairman of the company, Mr Edwin Tauber.

After the Second World War, Garlick was influential in launching trade education classes in Birmingham and lectured in timber technology. He was a founder member and chairman of the Midlands Wood Society and was awarded a fellowship of the IWSc in 1960. At the time of his tragic death, he was both editor of the IWSc Journal and chief examiner of the Institute. Unfortunately, no photographic images of George Garlick could be found.

John F Levy, 1971–1973

Professor John F Levy (born 1921 and died 2005) was the preeminent wood scientist at Imperial College, London. He became Imperial's first professor of wood science in 1981. He spent 15 years lecturing on timber and decay, in close conjunction with the FPRL. From 1977, he sat on the editorial board of the *Journal of Wood Science and Technology*.

His main fields of research and teaching concerned timber and its properties in construction and later the movement of organisms in wood and preservation and decay timber. Numerous publications include.[27–29] He worked on the 16th-century warship Mary Rose restoration project, especially the hull and the longbows discovered in the wreck. He deduced that the archers had to be above average height in order to use the longbows effectively. He was a rowing enthusiast and was cox and then captain of Thames Rowing Club. He mixed wood science and pleasure at Imperial College, by helping to create a very successful wooden racing four based on the monocoque principle, winning races at Henley with an Imperial crew, and paving the way for the carbon fibre constructions used by Olympians today.

David S Belford, 1973–1975

Dr David S Belford was an expert in the field of pressure impregnation of timber. In the period between 1957 and 1960, Belford published a string of research papers (e.g.[30–32] on the adsorption of metal ions on the surface of cellulose in conjunction with Professor R D Preston (Botany Department, University of Leeds). At that time, Belford was employed by Hickson's Timber Impregnation Co. (GB) Ltd, at Castleford, Yorkshire whilst R D Preston held the chair in plant biophysics at Leeds from 1953. David became group technical manager and technical director at Hickson's. David was also president of the BWPA. Later publications by David Belford, still based at Castleford, include Belford[33] on the pressure impregnation of building timber.

Felix S Palmer, 1975–1977

Felix S Palmer was on the agency side of the UK timber trade and entered the softwood trade in 1928. He was a well-respected trader and held executive positions with Hallam, Ramsay and Co. Ltd, the Price and Pierce Group and Churchill and Sim Ltd. He was chairman of TRADA from 1970 to 1972, chairman of the Softwoods Agents' and Brokers' Association from 1966 to 1969 and a member of the Executive Council of the TTF. He was an active member of The Commonwealth Forestry Association. He was awarded the CBE in 1974 and holds the Territorial Declaration.

A report on a seminar on 'The behaviour of wood products in fire' can be found on pp. 41–56 of the *Timber Trades Journal* of 9 April 1977. The seminar was organized by the Economic Commission for Europe Food and Agriculture Organization of the United Nations Timber Division, Geneva, with the UK Government as host, and was held in St Peter's College, Oxford (see[34] Felix Palmer was chairman of the Timber Committee). In his opening address, he stated that the committee's objectives were not necessarily to seek to expand markets for wood products, but rather to promote their rational utilization. He pointed out that people trading in the wood industry believed there was unjustified discrimination against wood products in building regulations, insurance rates and loan rates, because of inflammability. It was believed that differences in the assessment of wood products in national building codes created an effective barrier to international trade in processed wood products and building components. Palmer presented a paper at the 1983 IWSc Conference about forest industry expansion in New Zealand, with special reference to radiata pine.

Christopher G Latham, 1977–1979

Christopher G Latham had a long and deep involvement with the UK timber trade, supporting many organisations along the way. He gained his MA at Clare College, Cambridge and entered the accountancy profession, where he qualified as a chartered accountant, subsequently becoming a fellow chartered accountant. Christopher joined James Latham Ltd in 1959 and was appointed a director in 1965. He was

chairman of TRADA from 1972 to 1974 and became chairman of the James Latham group from 1987 to 1995. In 1975, he was chairman of the Commonwealth Forestry Association and a Forestry Commissioner. Many years of involvement in the IWSc culminated with Christopher being appointed president in 1977. He was president of the Timber Trades' Benevolent Society in 1981 and Trustee from 1982 to 1991.

Donald J B White, 1979–1981

Dr Donald James Butt White was an academic in the Department of Botany, University College, London, becoming a lecturer in 1947 and a senior lecturer 10 years later. He became a fellow of University College in 1975. His PhD was on the development of the runner bean leaf.[35] His publications include papers on lateral shoots,[36] tension wood in sassafras,[37] and reaction tissue in plants.[38] These demonstrate his great interest in cellular structure and function in wood, as a leading wood anatomist. He also wrote an article on Blakeney Point Nature Reserve[39] describing the close association between the reserve and University College.

White and co-author Wilson[40] published a textbook intended for students of timber technology and undergraduates studying plant sciences, written to replace Jane's 'The structure of wood', which was out of print. Ten chapters included: Sources of timber; the structural organization of a tree; tree growth at the cellular level; the anatomy of secondary xylem: conifers (softwoods); the anatomy of secondary xylem: dicotyledons (hardwoods); the ultrastructure of wood – its importance in understanding wood properties; wood surfaces and their underlying structure; variability of wood; reaction wood – its structure, properties and functions; and the identification of timbers.

Christopher C Lorenzen, 1981–1983

Christopher C Lorenzen was a close colleague of Ronald Edward (Ron) Groves, and together they built up International Timber plc into a vehicle that facilitated the merger with Montague L Meyer in 1982 to create Meyer International, the largest timber importing and merchanting company of the early 1990s. Groves became chairman and managing director of Meyer International and died in 2003, aged 82. The Meyer timber import business became an independent business in 1998 via a management buyout. In 2002, it sold its softwood trading operation to focus entirely on wood-based panel products.

Lorenzen was elected president of the IWSc in September 1981 (*JIWSc*, Issue 9, Number 50, p. 50). At the time he was director of International Timber plc and a past chairman of the National Hardwood Importers Section of the TTF. He was a fellow of the IWSc, a fellow of the Institute of Purchasing and Supply and a member of the Institute of Marketing. He was a strong advocate for fuller utilisation of forest resources and worked very hard to promote the IWSc over many years.

Geoffrey K Elliott, 1983–1984

Dr Geoff K Elliott OBE had a long career in forestry and wood science. He graduated from the Department of Forestry and Wood Science, University College of North Wales, Bangor, in 1955 with a BSc in Forestry, and then studied for a Masters Degree in Forestry at the University of British Columbia, Canada.[41] He returned to Bangor as a lecturer in forest mensuration, statistics and timber utilisation and in 1966 completed his PhD on the properties of Sitka spruce.[42]

Geoff's greatest achievement at Bangor was the introduction of degree programmes in wood science. Geoff was an inspiring and challenging teacher who had a profound and real interest in all his students, remembered for his kindness and sense of fun. Geoff was one of the first forestry academics to foresee the important role of plantation-grown timbers in future wood supplies both in Britain and in tropical countries.[43] He also recognised the problems of using these timbers in place of traditional timbers and led his research group to focus primarily on understanding the characteristics of plantation timbers and their relationship to utilisation.[44]

Geoff held visiting professorships in wood science in Brazil and Papua New Guinea and advised on education and training in several other countries. He carried out studies on the use of plantation timbers for the United Nations Industrial Development Organisation, Food and Agriculture Organisation, the Commonwealth Secretariat and Official Development Assistance. From 1984 Geoff spent 10 years in the timber industry. As president of the IWSc, he addressed the IWSc 1983 Annual Conference with his characteristic humour and insight on the future of timber in the 1990s. Geoff served on the Council of the Institute of Chartered Foresters and chaired its Education, Training and Research Committee. He was also a member of the Home Grown Timber Advisory Committee and for several years chaired its technical sub-committee. In 1996, his many contributions to forestry and wood science were recognised by being awarded an OBE

Terence Mallinson, 1984–1986

A graduate of Jesus College, Cambridge, Terence was one of the timber trade's foremost leaders. He studied economics and Law at Jesus College Cambridge. He was a director of William Mallinson & Sons Ltd, pioneers in hardwoods and manufactured wood products. He was later director of Mallinson Denny, a manufacturer of polymer impregnation products and the UK's leading plywood manufacturer.

Terence devoted much time to furthering and guiding trade bodies. He was chairman of TRADA (1976–1978) and was involved with various TRADA Committees for many years. He was president of the Institute of Carpenters and helped to develop the Carpenters' Company's Wood Awards (today, the Wood Awards: https://www.carpentersco.com/craft-activities/wood-awards/). He was president of the TTF, founder of the Forest Education Initiative and a Forestry Commissioner between 1989 and 1996. Obituary: https://

www.ttjonline.com/news/uk-timber-evangelist-terence-mallinson-dies-aged-90–7561605

Jean M Taylor, 1986–1988

Jean Marion Taylor (1924–1999) served as president of the IWSc from 1986 to 1988 and is likely to have been one of the first female members of the IWSc. Taylor served in the Women's Auxiliary Air Force during the Second World War working on airframe maintenance and later graduated from Cardiff University with a degree in Zoology.

She joined the Entomology Section of the FPRL under Dr R C Fisher in 1949 and was part of the post-war intake to FPRL which included John Bletchly, John Brazier, Joe Carruthers, Bill Curry, Roy Laidlaw, John Savory, John Sunley and Michael White, who spent much of their careers at the Laboratory and made major contributions to wood science. Jean Taylor's work was concerned with the prevention and control of wood-boring insect infestation.[45,46] She led the evaluation of newer generation insecticides[47] and the development of laboratory testing technology and prediction of real-life performance. She played a major role in collaborative programmes with the European Standards Organisation, CEN and the International Research Group on Wood Preservation.

Twenty years after joining FPRL, she became technical director at Protim, where she stayed until retirement. IWSc played a large part in Taylor's life. She was elected a fellow in 1962 and served on various committees before becoming president at a time of considerable change for the Institute. Her clear analytical approach and gift for enthusing people were put to good use during this time.

John Brazier, 1988–1990

Dr John Brazier was an eminent wood scientist based at FPRL from 1948 until the end of his career. At the University College of North Wales, Bangor, he was awarded a BSc in Forestry (1947), a BSc (Hons.) in Botany (1948) and later a DSc in 1981. At FPRL he began as a researcher in the Wood Anatomy section in 1948 and in 1968 was promoted to section leader. By 1971 he fronted a group specialising in the anatomy, structure and properties of wood. Dr Brazier's research group assessed the large range of tropical hardwoods in terms of their properties and end uses,[48,49] especially tropical hardwoods such as *Dipterocarpaceae*.

He studied the effect of plantation silviculture on the quality of timber produced. He liaised with the Forestry Commission in assessing which wood species could be successfully grown in the UK,[50] especially Sitka spruce (*Picea sitchensis*).[51,52] Sitka today accounts for a major share of the UK carcassing market. He advocated genetic selection of Sitka to improve stem form and showed that 2500 trees per hectare were the optimum to achieve an average of 90% usable framing from the crop. He made a significant contribution to the establishment of UK and European Plywood Standards and authored or co-authored over 70 research papers.

His contribution to the timber trade was further enhanced as a founder member of the IWSc and he was president from 1998 to 1990. His involvement continued beyond affiliation with IOM3 and the formation of the WTS. He set up and wrote courses on a voluntary basis under the management of IWSc to educate members of the timber trade and oversaw subsequent revisions. He formulated the IWSc examination system and for many years until 2010, including after retirement in 1987, he was chief examiner, believing that training and education were essential for the well-being of the timber trade.

Amongst many distinguished professional qualifications, John was a fellow of the Institute of Chartered Foresters where he was awarded the Silvicultural Prize in 1973 and 1994. He was chairman of the Commonwealth Forestry Association, from 1982 to 1985 and vice-president from 1986 to 2013, and he was a member of the British Forestry Commission's Advisory Committees on Research and Home-Grown Timber (1980–1987). He was the coordinator of IUFRO Unit S5.01 Wood Quality (1978–1986) and received the IUFRO Distinguished Service Award in 1986.

A comprehensive record of Dr Brazier's career achievements and awards was prepared by Dr John Dinwoodie[53] in an obituary prepared after his death in 2013. Some of the information above has been extracted from this obituary.

Richard Venables, 1990–1992

Richard Venables had a lifelong association with wood and its usage through the sawmilling and manufacturing business, Venables Brothers Ltd in Shropshire, set up by his great grandfather in the 1850s, and still successful in this field under family management in the 2020s trading as Venables Oak. Experience in the preparation and use of oak particularly in the construction of oak-framed buildings has become a feature of the business. After schooling at Bryanston and two years National Service in the army he joined the family firm in 1951 and was chairman and managing director until retirement in 1989.

In addition to his work with the IWSc, Richard served as chairman of the merchants' division of the TTF and the Midland Area Branch of the TTF. Richard gave the president's address to the 1991 IWSc Conference. Besides his active church membership, from 1982 to 1991 he was the founding chairman for Stafford's successful newly formed Independent Grammar School. He also served as the first chairman of the first-wave NHS trust responsible for mental health care in Mid Staffordshire. On retirement, Richard took up cycling, and in 2015 at age 84 he completed a 200-mile sponsored cycle ride across Wales to raise money for a girl's refuge in central India. He completed a similar ride in the following year.

Keith Purcell, 1992–1994

Keith Purcell joined the Liverpool timber trade in 1965 and was promptly enrolled on a four-year apprenticeship which included attending night school classes on Timber Technology and Business Practice. As a result, he became a student member of the IWSc, commencing a career-long involvement with the Institute. Keith was seconded to a

hardwood agent/brokerage firm involved in the procurement of materials from all points of the hardwood compass. At that time Liverpool was second only to London for timber imports in general and there were daily arrivals on the Mersey from all over the world. The work was of a clerical nature that established an understanding of what was called Timber Trade Practice. This was supplemented with work on the Liverpool dock system, measuring West African logs (the old quarter girth tape) and the intriguing business of importing Greenheart from Guyana. Seventy-foot logs were no exception, requiring a very long tape and set of callipers.

IWSc study entailed monthly meetings with the Local Branch in Liverpool where Keith met other members of the trade. At that time every region had a very active IWSc Local Branch. In the early seventies, Keith found himself in the Liverpool softwood business, and in a short time he was out and about travelling. Shortly after came the start of a very long employment with Evans Bellhouse Softwood Importers covering the Nordic countries, Canada, Russia, and the specialist Parana Pine business of Brazil. In 2016, Keith retired as managing director (MD) after 42 years with the company (26 years as MD), during which time he travelled extensively sourcing products and visiting customers.

Following his IWSc studies, Keith joined the IWSc Liverpool and District Branch committee serving for many years. Whilst chairman of the Liverpool branch he became a member of the IWSc Council, becoming president in the period 1992–1994. His two-year term as president introduced sponsorship to the IWSc Annual Conferences held in York in 1993 and Chester in 1994. Both conferences were very well attended as a result of a strong conference committee and the introduction of sponsorship. Purcell visited every IWSc region to establish this face-to-face contact with the branch membership. As past president, he visited the Institute's four branches within Australia. He retired from the Board of the WTS (successor to the IWSc and part of IOM3) in 2020, after over 55 years of involvement with the IWSc/WTS. Keith was a fellow of IWSc and was awarded the prestigious IOM3 Outstanding Contribution Award in 2015.

Martin P Ansell, 1994–1996

Dr Martin P Ansell graduated with a BSc in Materials Science from the University of Sussex and a PhD in Solid State Physics from the University of London. Following two years of R&D experience at Standard Telecommunication Laboratories developing new glass formulations he changed fields radically to take up a post-doctoral position working on structure-related properties of wood at the University of Bath.[54] In 1979, Martin was appointed to a lectureship in the School of Materials Science and over the years developed a reputation for his work on the fatigue of laminated wood for wind turbine blades,[55,56] the creep and fatigue of wood-based panel products,[57] the performance of bonded-in connections for timber[58] and the properties of natural fibre composites.[59] He is the editor of a book on wood composites.[60] He is the author of over 200 academic papers, and his publication record can be found by accessing 'Martin Ansell' in Google Scholar Citations.

Martin Ansell (Fellow of the Institute of Materials, Minerals and Mining) is a long-standing board member of the IWSc, WTS and Wood Technology Group. He was chair of the Western Counties Group of the IWSc for several years and was president of the IWSc from 1994 to 1996. During his presidency, he co-organised two successful annual conferences in Bristol and Edinburgh. He received an Outstanding Achievement Award from IOM3 in 2015. Currently, he manages the regular Talking Timber columns published in the *Timber Trades Journal* every two months.

Martin retired in 2017 although he is still actively engaged within the Department of Architecture and Civil Engineering at the University of Bath as Honorary Reader in Materials. Throughout his career at Bath, he has won numerous grants from UK research councils and the European Union and managed Knowledge Transfer Partnerships working with industry. He supervised over 30 graduate PhD students and was an external examiner for degree programmes at Buckinghamshire College and Swansea University.

Peter Latham, 1996–1998

Peter Latham has worked in the timber industry since 1973, latterly as chair of timber distributor James Latham plc from 2006 to 2017. He was also a Forestry Commissioner, chair of PEFC International, a director of the Association Technique Internationale des Bois Tropicaux and a trustee of the Commonwealth Forestry Association. Peter's particular interests are training and education, as past chair of the TRADA Training and Education Committee and external examiner for the Bucks Chiltern University College Forest Products Technology Degree course, and sustainable forest management as chair of the TTF Forests Forever Committee and PEFC UK. He was awarded an OBE for services to the Wood Industry in 2012 and a lifetime achievement award by the Timber Trades Journal in 2018. Peter served on the Council of the IWSc from 1988 and was president from 1996 to 1998. He was treasurer at the time of the merger with IOM3. As a fellow of IOM3, he was awarded the T B Marsden Profession Medal for service to the Institute.

Richard Murphy, 1998–2000

Richard Murphy joined the Centre for Environment and Sustainability (CES) at the University of Surrey as a professor of life cycle assessment in 2013. He has a background in biological sciences with a BSc in Botany with Zoology from King's College London and a PhD in Pure and Applied Biology from Imperial College London. Richard has undertaken post-doctoral work in New Zealand and The Netherlands and, prior to joining CES, was a reader in plant sciences at Imperial College London. Richard is a member of DEFRA's Hazardous Substances Advisory Committee, BRE's Advisory Panel and British Standard Institution Committees. He is a founder and director of LCAworks Ltd and was chief scientific officer of Mycologix Ltd. Richard has advised the UK Climate Change Committee on Life Cycle Analysis for bioenergy systems. Richard received a Rector's Award for

Excellence in Teaching at Imperial College London in 2011.

Selected wood-related references include a review of leaching of chromated copper arsenate,[61] life cycle assessment of short rotation willow biomass[62] and life cycle design for engineered timber products.[63] However, these few references do little justice to Richard Murphy's very extensive research output which can be found by accessing "Richard Murphy" in Google Scholar Citations.

Geoff Bagnall, 2000–2002

After five years in the world of finance and banking, Geoff switched careers and entered the timber industry. He started as a sales estimator with Southerns-Evans in Widnes. While studying for the IWSc certificate examination, he volunteered to tackle a timber preservation correspondence course. This kindled an interest in wood protection and soon after successfully completing both examinations, he joined Hickson Timber Products Ltd as a technical sales representative.

Over the next 15 years, he gained considerable experience with a wide customer base consisting of architects and specifiers, timber and fencing merchants and double glazing and joinery manufacturers. Geoff progressed and held a number of managerial positions including fire retardant product manager.

He then moved to Timber Treatments to establish a new fire-retardant treatment centre in Leeds. Geoff became a director of Timber Treatments Group Ltd, which expanded into preservative treatment as well as selling timber and sheet materials via its merchanting company Europly.

His involvement with IWSc began when he joined the Liverpool and District Branch. He was elected branch chairman in 1985 and again in 1986 and was an active member of the IWSc Council from the mid-eighties. Geoff took a keen interest in the promotion of the Institute, in particular, the annual conference. He was responsible for revamping the conference style in 1993, with the continued emphasis on sponsorship. He stated that 'training and education are the lifeblood of the Institute but marketing IWSc services and courses is equally important' and that 'a successful conference remains a flagship event', which is just as true today.

Jim Coulson, 2002–2004

Jim Coulson is a long-serving member of the IWSc and is a current member of the management board of the Wood Technology Group. He became a chartered environmentalist in 2019. Coulson founded the consultancy practice Technology For Timber in 1991 and is currently the director of the practice, which now trades under the title of TFT Woodexperts Ltd. The practice offers technical and training courses for the timber and construction industries leading to a Level 2 Award in Understanding Wood as a Material and a Level 4 Certificate in Wood Science & Technology.

Jim Coulson's book 'Wood in construction: How to avoid costly mistakes'[64] was published by Wiley-Blackwell, and his second book 'Sustainable use of wood in construction'[65] was published by the same publisher. His third book 'A handbook for the sustainable use of timber in construction'[66] followed. Coulson also sets the monthly thematic crossword puzzle in the IOM3's magazine Materials World (under the pseudonym of Anobium (woodworm)). Past president of the IWSc, Jean Taylor, published several research papers (e.g.[47] on the eradication of *Anobium punctatum* in timber when she worked as a wood scientist at FPRL.

Vic Kearley, 2004–2006

Dr Vic Kearley studied structural engineering at degree level prior to completing a PhD on the properties of resin-bonded concrete. He joined TRADA in 1984 and his career continued with TRADA Technology, BM TRADA and Exova. He was ultimately appointed technical author within Warringtonfire, part of Element. Kearley has extensive experience in research and commercial testing of wood and wood-based products in a variety of fields. At TRADA, he worked on the assessment of concentrated loads applied to wood-based sheet materials[67] and wood panel recycling.[68] With research staff at BRE, he developed a non-destructive system for the determination of stress in creep loading of wood-based panels.[69] He was also concerned with the performance of palm plywood.[70]

Kearley was heavily involved with the development of codes and standards for wood-based panels at both the UK and European levels. This included a period as technical secretary of CEN TC112 WG4 dealing with test methods for wood-based panels (see[71] test method development was supported by his involvement in several multi-partner European Union-funded collaborative research projects, including roles as project coordinator.

Geoff Taylor, 2006–2009

Geoff Taylor spent over 45 years in the UK construction industry. His original background was in paint/wood stains, and he is an acknowledged expert on coating systems. He started his career with an apprenticeship in painting and decorating. He has since gone on to gain management experience in technical, customer support, sales and marketing environments. He was employed by each of the then largest coating manufacturers in the world and timber companies, including Pro Woodcare (technical consultant), Sherwin-Williams (technical services manager, 1998–2002), Akzo Nobel (technical manager, 2003–2007), Timbmet (merchant sales director, 2007–13), International Timber (regional sales director, 2014–2016) and Metsä Wood (national accounts sales manager, 2020). Geoff was finally engaged in the role of timber support manager for Saint-Gobain (2016–2020) in the UK and has recently retired. Geoff remains both passionate and committed to all aspects of the timber trade.

Taylor's time as president was one of positive change, during a period of historical transition from the IWSc to

the IOM3 WTS. This challenge was met head-on, as was Geoff's desire to uphold the historical past of the IWSc. The balancing act was to combine the need to successfully find a 'new wood science home' in the climate of austere times.

Conclusions

The 27 presidents of the IWSc were a rare blend of outstanding industrialists, professional researchers and academics. In the 1950s, there was an urgent need to provide education and training in the timber trades following the end of WW2. Notable contributors to education and training included Bryan Latham who provided the impetus to launch formal qualifications in wood science and timber technology. Brian Eades was an influential chairman of the Education Committee of the IWSc for more than 20 years and John Brazier formulated the IWSc examination system and was an outstanding chief examiner for many years, well into retirement.

The 1950s to 1980s were a golden period for research institutions such as BRE, FPRL and TRADA with increasing international cooperation. Many IWSc presidents were drawn from these institutions, conveying their knowledge and expertise to institute members. As predicted by Frank Jane, the third era of wood science was underway. Broadly speaking an alternating balance between industry-based and university-based presidents was sought. Cox, Boulton, Levy, White, Elliot, Ansell and Murphy were all university based but it is fair to say that industry-based presidents frequently worked closely with research institutions and universities, for example, Findlay (mycology) and Belford (preservation).

Throughout the latter part of the 20th century, IWSc branches thrived throughout the country and the two-day IWSc conference became an annual fixture attracting eminent national and international speakers. The conference format consisted of a full-day conference and a field trip enabling delegates to experience the work of sawmills and panel products manufacturers, engage with forest industries and view botanical gardens. Much new information about UK and global timber species emerged, standards were developed, timber engineering became very sophisticated and new wood composite products were developed. As time went by into the 2000s there was declining support for branches meetings, but the central IWSc activities remained strong, including education and training (e.g. Coulson).

By 2009 the time was right for the IWSc to merge with IOM3. The Institute became part of an extensive interactive materials community in the form of the WTS. *The Journal of the IWSc* became the *International Wood Products Journal* with an impact factor and continues to publish state-of-the-art research and reviews from contributors worldwide. Further dissemination of knowledge has been achieved through newsletters, extensive web-based material and regular articles in the *Timber Trades Journal* and elsewhere. Hence, the legacy of the IWSc has been maintained through the WTS, recently rebranded as the Wood Technology Group. Education and training remain key elements of the group's activities, and qualifications are aligned with IOM3 membership grades. The annual conference held at IOM3 headquarters attracts a wide audience. The future of wood as a sustainable and recyclable construction material is assured and the foundation laid by the early presidents of the IWSc continues to bear fruit in the 21st century.

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