



WOOD SCIENCE NEWSLETTER

Institute of Wood Science

March 1991

FROM THE PRESIDENT

Institute members working in the UK trade will be acutely aware of the very difficult current business climate; the shrinking market, competitor's (always competitor's!) silly prices: the stock you wish you hadn't bought — you could buy it so much cheaper now, and the interest is killing you; the encroachment of competitive materials aggressively and expensively marketed; overheads, inflation-driven, surging ever upward, threatening to overwhelm available funds. Who'd be in the timber trade in 1991?

And members in academic and technical fields will know similar pressures. Customers urgently looking to you for more cost effective methods of working, sometimes quite unable to take the longer term view however much they would like to; Changes in government policy; stringency in budgets and funding.

We know our jobs but do we know our business? Can we as an industry step back from the "fire fighting" to analyze the longer term threats and opportunities and develop a strategy for dealing with them?

This year's Annual Conference at Bath attempts to help you do just that. For some traders the challenge of 1991 sometimes seems little more than to win the fight for survival, but trade will mend, new opportunities will open up, and surely now is the time to start making plans for a more successful future.

Richard Venables AIWSc (President)

PRESENTATION OF PRIZES AT THE IWSc AGM

At the Annual General Meeting of the IWSc at the Timber Trade Federation offices on 25th September 1990, Mr. Peter Latham presented prizes to Trevor D. West and Mark R. Townsend who had been awarded highest marks in the IWSc Final Examination.

The first prize, the Bryan Latham Prize, and a cheque for £250 from James Latham plc, together with the TTJ silver cup went to Trevor West of Nixon Knowles & Co Ltd. The second prize of £100, presented by the Swedish Finnish Council, went to Mark Townsend of Harcros Timber & Building Supplies Ltd. Both Mr. West and Mr. Townsend attended Mid-Warwickshire College of Further Education.

The joint winners of the Preliminary Examination (Open Learning) who both won the TRADA prize of £50 each and the book "Timber in Construction" were Mrs. Joan C. Smith of Hackman (UK) Ltd who attended Buckinghamshire College of Higher Education and Nigel P. Hodgson of Edward Hodgson & Son Ltd who attended City College, Liverpool.

It was exceedingly pleasant for the Honorary Officers of the Institute to meet the prize winners both of the Open Learning and the Institute's own examination prior to the actual prize giving ceremony. It gave an excellent opportunity for an informal chat and to gain some understanding of the problems students sometimes face and, of course, for us to promote the Institute.

The generous luncheon of roulet de saumon followed by supreme de canard aux cassis failed to materialise, but the beef and cheese sandwiches were well received.

Mr. Peter Latham presented the prizes and in his address spoke of the need for education in an ever demanding and competitive industry. It was vital, he said, that companies should encourage those who took the Open Learning Course to go on to the two-year IWSc course and acquire a professional qualification. The industry needs people with sound product knowledge and this quite clearly means that Industry needs the Institute of Wood Science.

Maurice Holloway, AIWSc (Director)



Mark Townsend, Peter Latham, Joan Smith, Trevor West, Dr. John Brazier and Nigel Hodgson at the presentation of prizes prior to the AGM.

OFFICERS of the IWSc

President — R. Venables
Vice Presidents — K. Purcell
W.G. Keating
P.D.L. Latham
Treasurer — J.G.R. Perry

Council Members

Elected T.G. Bagnall, R.L.H. Carlile, A. Comben, Prof. E.J. Gibson, Dr. G.S. Hall M. Ryan, D.B. Scutt, J. Sunley, W.D. Vincent, Dr. L.R.J. Whale, R.B.P. White.

Co-opted J.M. Baker

Past Presidents Dr. D.S. Belford, Dr. J.D. Brazier, Dr. G.K. Elliott, C.G.A. Latham, Prof. J.F. Levy, C.C. Lorenzen, T.S. Mallinson, F. Palmer, Jean Taylor, Dr. D.J.B. White.

Editor Dr. R.J. Murphy

Branch Chairmen R.I. Arends, R.D. Boyd, J. Coulson, Joan A. Crome, Dr. J.A. Everton, Prof. B. King, J.J. Matthews, T.E. Shaw, D.O. Carney, Dr. L.R.J. Whale, R.B.P. White, Prof. I.S. Ferguson.

IWSc CONFERENCE BATH 3rd & 4th May 1991

"THE CHALLENGE OF THE 90's"

Book your place NOW!

Application forms available today.

CORPORATE MEMBERS

The Council of Management wish to record its thanks to those listed below for their support as Corporate Members. J. Alsford Ltd., Anglo-Norden Ltd., John Boddy Timber Ltd., BSW Timber plc, Crosby-Sarek Ltd., Coillte, Cuprinol Ltd., James Donaldson & Sons Ltd., EOLAS, Forest Service N. Ireland, Fosroc Ltd., Glennon Bros. Timber Ltd., Guildway Ltd., Harcros Timber & Building Supplies Ltd., Hickson Timber Products Ltd., Hunter Timber Ltd., James Latham plc, Marlow & Co. Ltd., F.W. Mason & Sons Ltd., Meyer International plc, MBM Forest Products Ltd., Price & Pierce Ltd., Rentokil Ltd., Timber Trade Federation, Timbmet Ltd., TRADA, Travis Perkins plc, Henry Venables Ltd., Watford Timber Co. Ltd.

EDUCATION AND TRAINING

BUCKINGHAMSHIRE COLLEGE OF FURTHER EDUCATION

MA Degree in Furniture Design and Technology

This degree is designed to allow students who have already attained a first degree or CNA A equivalent, to explore in more depth their chosen specialised area of furniture design.

The course takes place over one year full time and combines an intensive lecture programme on technology, commerce and industry-related subjects with a series of individual research projects. In addition to extending student's design capability, the course aims to broaden communication, research, analysis and decision-making skills.

Bucks college maintains good contact with local furniture manufacturers and with importers of European furniture who maintain offices and showrooms in London. Bucks college has a wide range of workshops which allow many materials and processes to be explored. These include not only wood, plastics and metals but also screen printing and woven textiles.

For further information please contact **Chris Cattle** at the college, Tel. 0492 22141.

Diploma in Timber Studies for Students home and abroad

Bucks college offers a Graduate Diploma in Timber Studies which covers all aspects of wood technology, management, marketing and commercial practice.

This one-year full time course is designed primarily for the mature student with previous experience in forestry or the timber industries, or to provide specialist training to graduates from other disciplines. It is particularly relevant to the needs of certain overseas countries where there is an increasing demand for personnel qualified or experienced in forestry or wood processing. Indeed, since its inception fifteen years ago, more than 650 students from over 40 countries have graduated with a Diploma in Timber Studies from Bucks college.

There are three main areas of study; timber technology, management, and a specialist subject which is selected for individual students depending on their requirements.

For further information please contact **Abel Comben** at the college, Tel: 0494 22141

VIDEOS.....VIDEOS.....VIDEOS

WOOD STRUCTURE, DEGRADE AND PROTECTION

A series of eight video tapes have been prepared based on lectures given by Professor John F. Levy FIWSc in Denmark in 1986. These revised versions were edited by Per Jacobsen and recorded in September 1988 by Casper Thorsoe Video Productions. A brief description of topics covered in each lecture is given below.

1. The Forest Resource (59 min)

An overview of some of the native and plantation forests found in various locations around the globe. World consumption patterns for hardwoods and softwoods are briefly reviewed and British species difficult to preserve are identified. Importance of end use specifications.

2. Wood Structure and Micro Structure (40 min)

The macro and micro structure of hardwoods and softwoods is presented with particular emphasis towards application to decay. Numerous examples are given of the structure of wood in relation to wood quality and properties.

3. Water Relationships of Wood (32 min)

The water relationships of wood in the living tree and of wood as a material. These include bound and free water, equilibrium moisture content and fibre saturation point. The purpose for drying wood, aspects of wood bending and moisture zones in wood poles.

4. Effect of water movement in wood (43 min)

Water movement in wood in relation to wood decay; the effect of soil moisture on EMC in poles; nitrogen content and colonisation within posts. Other topics include; water potential and swelling in Spruce and Scots Pine; moisture movement in heartwood, sapwood, and in wood out of ground contact in relation to paint films.

5. Wood Destroying Organisms (51 min)

The reasons why organisms attack wood followed by numerous examples of various types of decay. A general description of termites, beetles, marine borers, fungi and bacteria is given along with discussion of life cycles of some of them.

6. Ecology and Micromorphology of Wood Decay (50 min)

The reasons why organisms enter wood, the sequence of events within the wood, and the effects of organisms on the wood itself particularly the cell wall. The role of nitrogen, micromorphology of colonising organisms, their biochemistry and the role of bacteria in colonisation.

7. Wood Preservation (30 min)

The cost of major repairs is emphasised and a summary of major wood preservatives in use today given together with a discussion of the ideal properties of a wood preservative. Treatment processes are mentioned, also the danger of extrapolating treatment results from one species to another.

8. Microdistribution of Preservatives in Wood (19 min)

Differences in microdistribution due to factors such as treatment process, moisture content, species, lignin content, checks, splits and incising. Treatments of laminated structures, also the difficulties associated with the procedures for the evaluation of wood preservatives.

These videos can be purchased singly or as a set. Further details and prices are available from **Prof. J.F. Levy, 5 Washington Road, Barnes, London SW13 9BG**

PARTICLE BOARD INDUSTRY VIDEO

Particle Boards — Managing wood the modern way. Made for the UK and Ireland Particleboard Association by Renaissance Vision of Norwich, the film depicts today's techniques of particleboard manufacture in Great Britain and Ireland, and explains the new product standard BS 5669:1989 'Particleboard', four of the five parts of which were recently published. Chipboard, oriented standboard and cement-bonded particleboard are described in relation to their principal uses.

Suitable for conferences, marketing and education programmes the video can be obtained from: **UKIPA, Maxwell Road, Stevenage, Herts. SG1 2EP**, Price £26 including postage (VHS and PAL systems).

MID-WARWICKSHIRE COLLEGE

Mid-Warwickshire College have published a new brochure detailing their courses in timber technology for 1991.

Copies can be obtained from **Mid-Warwickshire College of F.E. Warwick New Road, Leamington Spa, CV32 5JE**. Tel: 311711.

CONGRATULATIONS TO THE FOLLOWING STUDENTS WHO HAVE PASSED THE IWSc EXAMINATION AND GAINED THE FOLLOWING GRADES

Associateship

W.J. Abrams, Brigg, S. Humberside.
M.R. Barton, Newcastle upon Tyne.
S. Cairns, Grangemouth, Scotland.
R. Cummins, Prescott, Merseyside.
A.R. Donaldson, Halifax, W. Yorks.
R. Fearnley, Macclesfield, Cheshire.
C. Jardine, Dumfries, Scotland.
Gwen Kennedy, Grangemouth, Scotland.
G.S. Kidd, Downham Market, Norfolk.
C.R. Knapp, Orpington, Kent.
G.S. Lacey, Wolverhampton, W. Midlands.
S.C. Lawford, Loughton, Essex.
J.R.K. Mallender, Doncaster, S. Yorks.
J.R. Marsden, Chorley, Lancs.
S.C. Mathews, Ossett, W. Yorks.
A. McShane, Braunstone, Leics.
C. Merritt, Watford, Herts.
D.R. Morris, Withnal, Chorley, Lancs.
N.J. Murphy, Coventry, W. Midlands.
A.S. O'Byrne, Birmingham, W. Midlands.
R.P. Quarterman, Beddington, Surrey.
D.A. Ratcliffe, Heanor, Derbyshire.
S.P. Read, Amersham, Bucks.
W.J. Shepherd, Manchester.
K. Smith, Chopwell, Tyne and Wear.
M.A. Taylor, Rochdale, Lancs.
A.J. Thrale, St. Albans, Herts.
M.R. Townsend, Newark, Notts.
T.D. West, Nottingham.
G.C. White, Leominster, Hereford.
G. Wits, Loughborough, Leics.

Certificated Members

J.M. Abell, West Bridgford, Nottingham.
A.J. Armstrong, Burely in Wharfedale, W. Yorks.
R.J. Barrett, King's Lynn, Norfolk.
D. Bishop, Coleford, Gloucester.
C. Colvin, Edinburgh, Scotland.
M. Curtis, Stockport, Cheshire.
A.M. Duncombe, Whitwick, Leics.
A.M. Gorbett, Scunthorpe, S. Humberside.
C.D. Green, Chiswick, London.
A.M. Hael, Shepton Mallet, Somerset.
G.A. Hall, South Shields, Tyne and Wear.
J.M. Hepper, Enfield, Middx.
S.A. Hill, Redhill, Nottingham.
J. Hipkins, Penrhy, Anglesey.
E.F. Mackey, Newcastle upon Tyne.
A.J. McDermott, Whitwick, Leics.
S.G. McNally, Glasgow, Scotland.
H.M.S. Mott, Tollerton, Notts.
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M.J. Pullan, Leeds, W. Yorks.
C.N. Robinson, Burnley, Lancs.
D. Say, Clevedon, Avon.
J.L. Shepherd, Shoreham by Sea, Sussex.
R.J. Sleigh, Mickleover, Derby.
M. Steven, Cheshunt, Herts.
S.I. Watts, Willerby, Hull E. Yorks.

BRANCH LINES

MIDLAND BRANCH — A VISIT TO HAMPTON COURT

A group of Midland members and their wives spent a pleasant weekend in glorious weather at Hampton Court on 13/14 October. Readers will know that this is a Tudor and Stuart Palace on the River Thames built by Cardinal Wolsey and given in the 1520's to Henry VIII who made substantial alterations and added the Great Hall. In the 1690's Wren's rebuilding included the Fountain Court and the east and south fronts for William III.

First on the agenda was a tour of the Care of Buildings Exhibition, appropriate for old or modern construction, with an introduction by John Waller.

Next we were privileged to be taken on a guided tour by a most enthusiastic architect, Dan V. Vanoli, superintendent of the restoration work by the Property Services Agency after the disastrous fire in 1986 which caused considerable damage to the King's Audience Chamber. Members were not surprised to see ample evidence of the durability of large sections of hardwood timber in fire, maintaining strength with increasing temperature by sacrificing the outer layer to form a protective layer of charcoal cooled by transpirational cooling. The undamaged wood, reducing at only half a millimetre a minute clearly maintained the structural integrity of the building.

After lunch, the Palace with its important collection of paintings, and gardens were explored at leisure. Reporting restrictions are lifted to reveal that senior members of the IWSc were lost in the Maze!

Overnight accommodation was at the Highclere Hotel, Sunninghill, where an informal dinner had been arranged; one notable member present was the National President, Richard Venables and his wife.

On Sunday some members visited Windsor Castle before returning home, happy after a most successful event but sad that so many other couples hadn't realised what they had missed. Next year perhaps!

Alan J. Edge FIWSc

JOURNAL OF THE INSTITUTE OF WOOD SCIENCE

The last issue of the Journal introduced a new dimension in reproducing three of the papers presented to the Conference last May. The thinking behind this is two-fold. Firstly, it gives us all a better idea, if we are not Conference attendees, of the interesting papers that are presented on these occasions and underlines the reality that they are not above the heads of us more humble IWSc members. Secondly, it gives us something in the Journal that more of us can read and understand. It would be wrong as an Institute not to produce a scientific journal and it would be equally wrong to down-grade it so that it lost its international acclaim. It never fails to amaze me how widely the Journal is circulated. It literally can be found in libraries and universities in all four corners of the earth. Virtually all the English speaking countries take copies, and it is well distributed throughout Europe, South America, China, Japan, Russia, Indonesia, India and Africa, and if you happen to be in Romania or Turkey you will find a copy there as well.

Hopefully now by keeping the standard at its very high level and by adding to it in each edition three readable papers from the Conference, we have the best of both worlds.

Maurice Holloway, AIWSc (Director)

LIVERPOOL & DISTRICT BRANCH

One of the dominating themes of presentations to all branches of the IWSc has been the tropical rain forest issue. The Liverpool branch has been no exception. Members were invited to join TRADA's annual open meeting at Haydock Park Racecourse where Dr. G. Elliot (Price & Pierce) and Mr. G. Pitts (TRADA) gave excellent presentations covering the seminar title "How green is our valley?"

It has been recognised for a long time that ecological issues are of paramount importance to the trade. Opponents of our trade practices will not simply "go away" if we ignore them for long enough. In addition they will not confine their criticism to the tropical rain forest. Taking the above into consideration the Committee have arranged for Mr McRae or COFI to talk about "Problems for the producer in Western Canada." This presentation (in combination with a buffet supper) is due to take place at Haydock Park Racecourse on 8th May 1991. Places are likely to be limited and it is suggested that anyone who is interested should book early.

The more that we learn about ecological issues the better we will be able to promote the true benefits of one of the most "green" building materials available to man.

Dr. Peter Beele AIWSc

THE IWSc WELCOMES THE FOLLOWING MEMBERS ACCEPTED INTO THE GRADES AS FOLLOWS:-

Fellows

Dr. Philomena Curran, Galway, Ireland.

Associates

W.H. Algar, Donvale, Vic. Australia.

H. Bryan, Bristol, Avon.

W. Joe, Randwick, NSW, Australia.

M. Quaide, Dublin, Ireland.

Janine Maiden, Stenson Meadows, Derbyshire.

T. Swales, Bollington, Cheshire.

R.E. Toon, Thurcaston, Leics.

I.N. Whyte, Trevallyn, Tas. Australia.

Certificated Members

S.C. Arnheim, Endeavour Hills, Australia.

N. Hyssoli, Altona North, Australia.

I.J. Neal, Croydon South, Australia.

A.R. Rodrigo, Dandenong, Vic. Australia.

SCOTTISH BRANCH

The autumn session of the new series of Branch meetings went well with talks by Professor King on wood decay and by Mr Marshall on the joinery industry. Both speakers gave excellent presentations showing distinct views of their particular fields and the questions and after-discussions were probing and enlightening for the attenders.

Our new year meetings commence with the buyer's view of the market and there is to be a visit to the Countryside Commission for Scotland near Perth in the spring.

Our attendances have been showing a steady increase from the first meetings in September 1990 and we are very pleased to see interested non-members as guests, so please bring a colleague along to the next meeting.

Our management committee are now working on a programme for 1991/1992, perhaps with a joint meeting with another professional organisation — please give them all your support.

Eric Wyllie (Secretary)

FINANCE

The Finance and General Purposes Committee met prior to the last Council meeting on 4th December. The two main points from the meeting were that although the IWSc finances were in good heart, concern was expressed that the difficult economic climate may put support from our Corporate Members under strain, and it would certainly make attracting new members much more difficult. It was hoped that members, where they had some influence would do all they could to encourage companies to become Corporate Members. Any introductions they made would be carefully followed up by the Director.

The Committee were pleased to note there were now more than 200 members paying their subscriptions by direct debit. This helped to keep administration costs under control and certainly made payments by members so much easier. To encourage new members to complete the necessary direct debit forms, it was proposed that the IWSc should offer to have their certificates framed, ready for hanging free of charge. This was subsequently approved by Council who also agreed that members displaying their membership certificate would help to give the IWSc a higher profile.

Maurice Holloway AIWSc (Director)

IAESTE — TRAINING FOR AN INTERNATIONAL FUTURE

For 42 years the International Association for the Exchange of Students for Technical Experience has provided British industry with the facility for recruiting foreign trainees and British students with the opportunity to live and work in a foreign country. Founded at Imperial College, London in 1948, IAESTE is an independent non-political student exchange organisation which now has offices in 54 countries worldwide. IAESTE's aim is to secure course related paid work placements abroad for students following scientific and technical degree level courses, thereby offering tomorrow's engineers, scientists and managers the chance to gain first hand experience of foreign markets and practices.

For further details contact IAESTE, The Central Bureau for Educational Visits & Exchanges, Seymour Mews, London, W1H 9PE, Tel: 071 486 5101

Characters of WOOD, WURLITZER & WESLEY — Maurice Sanders looks back

I was lucky enough to be given this book for Christmas and it is a fascinating read. It is the third of an unusual series of books by this author, the first two being, 'Stories of Round Timber Haulage' and 'Men, Mud and Machines.' I believe the first is out of print and I have not yet got hold of the second, but this last book is fascinating. It contains many photographs (300+) and descriptions of early regulation-defying transport of timber. There are numerous anecdotes of 'timber families' and how their businesses were built in the 'golden years' of timber.

The Wurlitzer became a second string as Mr Sanders became the local agent and later for Yamaha despite being a tree feller by profession. For good measure he includes stories of Reginald Foort and his 30 ton travelling organ. Do beg borrow or buy this book — you won't regret it. The author is Maurice H. Sanders and the publishers are Cortney Publications of Baldock Herts (1990). ISBN 0 904378 36 5.

Jean Taylor FIWSc

SIDE LINES

A TREE PRAYER

You who would pass by and raise your hand against me
Harken ere you harm me

I am the heat of your hearth on cold winter nights
The friendly shade screening you from the summer sun

My fruits are the refreshing draughts
Quenching your thirsts as you journey on

I am the beam that holds your house, the bed on which you lie
The timber that builds your boats.

I am the handle of your hoe, the door of your home

The wood of your cradle, the shell of your coffin

Listen to my prayer

Hear me now, I am a tree.

(Discovered by Alan J. Edge FIWSc at the Eagles Ridge Hotel, Stutterheim, South Africa near the indigenous Kolagha State Forest.)

INTERNATIONAL TIMBER ENGINEERING CONFERENCE

A four-day conference will be held between Monday 2nd and Thursday 5th Sept. at Church House, Westminster, London. A plenary session will be held on the first day of the conference. This will encompass EUROCODE 5 and its CEN support standards. On days 2-4 three concurrent sessions will be held and will present the latest development under 20 themes relating to timber engineering. It is anticipated that on these days approximately 170 conventional and 30 poster presentations will be made. On the second day a full time session entitled 'Innovation in the design and construction of timber structures' is being devised specifically to interest practising engineers and architects, and will be chaired by Ron Marsh of Ove Arup & Partners.

DAY 1 PLENARY SESSION

Special Guest Presentations

A global perspective on wood supply to the construction industry — H. Murray, Forestry Dept. FAO, Rome.

Changing nature of wood-based structural materials — Dr. M.R. O'Halloran, American Plywood Assn.

Timber engineering towards the year 2000 — Dr. H. Bruninghoff, Consulting Engineer, Germany.

Special Session — Chairman, Prof. J. Ehlbeck, University of Karlsruhe, Germany.

Part 1 EUROCODE 5

Introduction — H. Larsen, Danish Building Research Institute.

Serviceability criteria, especially floor vibration criteria — S. Ohlsson, Chalmers Technical University, Sweden.

Notched beams — P. Gustafsson, Lund Institute of Technology, Sweden.

Design of columns — H.J. Blass, University of Karlsruhe.

Design of glulam beams — F. Colling, University of Karlsruhe.

Design of trusses/trussed rafters — E. Aasheim, Norwegian Institute of Technology.

Joints, especially dowel-type joints — L.R.J. Whale, Gang-Nail Systems Ltd.

Part 2 CEN Support Standards

Introduction — J.G. Sunley, UK Timber Engineering Consultant.

Grading — P. Gloss, University of Munich.

Characteristic values/strength classes — A. Fewell, BRE, UK.

Panel products — D. Noack, University of Hamburg.

Glulam — H. Riberholt, Technical University of Denmark.

Further information and registration forms can be obtained from Julian Marcroft, TRADA, Stocking Lane, Hughenden Valley, High Wycombe, Bucks HP14 4ND, UK.

BWPDA CONVENTION 2nd-5th July 91, Cambridge

The following papers will be presented on the 3rd and 4th.

1. Preserving the past, protecting the future. — Dr. Martin Bigg (HMIP).
2. Improvements in safety and environmental protection at timber treatment plants; accelerated fixation and other systems. — Dr. C.R. Coggins (Rentokil) & M.B. Moldrup (DWPT).
3. Adding value to CCA treated timber. — Judith Cornfield and R. StuerGIS (Hicksons Timber products).
4. Advances in preservation treatment of commercially important timbers. — Dr. R.J. Orsler and G.A. Smith (BRE).
5. The cause and control of pretreatment decay in home grown poles. — Dr. D.J. Dickinson & Dr. R.J. Murphy (Imperial college).
6. Fundamental studies on the fungus cellar/soilbed. — Dr. K. Archer & Dr. A. Preston (Laporte, Timber Division)
7. The control of dampness below ground as a result of the rising water table in the London area. — P.N. Hewitt (Vandex).

Booking Forms are available from BWPDA, Building No. 6, The Office Village, 4 Romford Road, Stratford, London E15 4EA

DATES FOR YOUR DIARY

- April 7-9 **Conservatories '91** — Sandown Exhibition Centre.
- 14-18 **KBB Tradex** — Alexandra Palace.
- May 3-4 **IWSc Annual Conference** Hilton International Hotel, Bath.
- 8-14 **LIGNA International Trade Fair for Machinery & Equipment for the Wood Industries** — Hanover Fair Complex.
- 19-21 **Interior Design International** — Earls Court.
- June 11-13 **Warehouse Technology '91** — Olympia 2.
- 19-23 **Elegant Homes** — Sandown Exhibition Centre.
- July 2-5 **BWPDA Annual Convention** — St. Catherine's College, Cambridge.
- 13-15 **Craft Fair** — Sandown Exhibition Centre.
- Sept. 2-5 **International Timber Engineering Conference** — Church House, Westminster, London.
- 3-5 **Building Materials Exhibition** — Wembley.
- 19-22 **Self-Build Homes Show** — Alexandra Palace.
- 29-2 **Home Interiors Exhibition** — Earls Court 1 & 2.
- Oct. 13-14 **Craft Fair** — Sandown Exhibition Centre.
- 13-15 **DIY & Home Improvement Trade Show** — Olympia.
- 17-20 **London Woodworker Show** — Alexandra Palace.
- Nov. 24-29 **Interbuild** — NEC Birmingham.

WOOD DESTROYING INSECTS, Wood Borers and Termites by J.W. Creffield. This new handbook (Jan 1991) provides a ready source of reference to the more important wood borers in Australia. Most of the borers dealt with are pests of seasoned timber, however, those initiating attack in the tree and those which survive only in decaying timber are also discussed. The handbook (54pp, A4) \$30 Australian and is available from **CSIRO Publications, 314 Albert Street, East Melbourne, Victoria 3002, Australia. International Enquiries, Tel: (613) 418 7217 or FAX (613) 419 0459.**

ONE YEAR SABBATICAL PLACEMENT REQUIRED

Mr. A.S. Ngobil, MSc, AIWSc, is looking for a one year placement in wood preservation research.

Mr. Ngobil obtained a Diploma in Advanced Timber Technology at High Wycombe in 1980, and subsequently gained an MSc in Biodeterioration at Portsmouth (1981). His project for the MSc was control of termites carried out at the Princess Risborough laboratory.

Since 1981 Mr. Ngobil has been fully engaged teaching wood science and preservation up to Higher National Diploma. Any college or research establishment able to provide a placement can contact Mr. Ngobil at **Michael Okpara College of Agriculture, UMUAGWO — OHAJI, P.M.B. 1472, OWERRI — IMO STATE, NIGERIA.**