

DANIEL A. TINGLEY, PH.D., P.ENG., MIE AUST., CPENG., RPEQ
Wood Research and Development



Dr. Dan Tingley serves as Executive Director and Senior Design Engineer for Wood Research & Development Ltd. He is the inventor of the award-winning FiRP® Panel reinforcement technique, which makes use of high-strength reinforced plastics to strengthen wood products.

Here is a brief biography of Dr. Tingley. A complete curriculum vitae is available in PDF format with more information on his experience.

ACADEMIC BACKGROUND:

- **Ph.D. Oregon State University, 1997, Major in Forest Products, Minor in Civil Engineering**
- **M.Sc.C.E. University of New Brunswick, 1988, Structural Engineering in Wood**
- **B.Sc.F.E. University of New Brunswick, 1977, Forest Engineering**

BRIEF CAREER SUMMARY:

Dr. Tingley has worked in the wood products industry for over 45 years and currently holds more than 40 published patents in the reinforced wood field in the US and other countries. He has authored over 125 conference proceedings, publications, and articles in the area of reinforcement of wood and wood composites. Dr. Tingley is responsible for the oversight of projects in the US, Canada and Australia. He has over 1300 projects under seal.

Dan Tingley has worked closely with government and clients to produce innovative designs for structures worldwide. Dr. Tingley holds memberships with engineering associations globally, is a published author, and teaches and speaks at conferences around the world.

Dr. Tingley is:

- **Senior Engineer for Wood Research and Development (WRD) and IAS accredited Testing (TL1-93) and Third-party laboratory (AA 644) as well as ALSC certified test agency (Test Lab 21) with a large Commercial Timber Structures design and engineering team with offices in Australia, Canada, United States, South Africa and Saudi Arabia.**
- **Currently the Chairman of the subcommittee on the Development of The Handbook of Conventional Maintenance Practices for Railway Bridges for Committee 10 – Bridge Maintenance & Construction**
- **Chairman of the subcommittee on specifications for Committee 7- Timber Structures.**

CURRENT EMPLOYMENT:

Wood Research and Development Ltd.

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MEMBERSHIPS:

USA

- **ALSC - American Lumber Standards Committee – Lumber Agency & WPM Agency**
- **AREMA – American Railway Engineering and Maintenance of Way Assoc.**
- **ASCE – American Society of Civil Engineers**
- **ASTM – American Society Testing Materials: Voting Member**
- **FPS – Forest Products Society**
- **SAF – Society of American Foresters**
- **SWST – Society of Wood Science and Technology**
- **WCLIP – West Coast Lumber Inspection Bureau**

CANADA

- **APEGBC - Assoc. Professional Engineers & Geoscientists of British Columbia**
- **APEGNB – Assoc. of Professional Engineers & Geoscientists of New Brunswick**
- **APEGA – Assoc. of Professional & Geoscientists of Alberta**
- **APEGS – Assoc. of Professional Engineers & Geoscientists of Saskatchewan**
- **APENS – Engineers of Nova Scotia (Life Member)**
- **APEY – Assoc. of Professional Engineers of Yukon**
- **APEGM – Engineers Manitoba**
- **CSCE – Canadian Society for Civil Engineering**
- **ICOMOS – International Council on Monuments and Sites**
- **PEGNL – Assoc. of Professional Engineers & Geoscientists of Newfoundland & Labrador**
- **PEO – Professional Engineers of Ontario**
- **SEA BC – Structural Engineer Association of British Columbia**
- **Canadian Wood Council**

AUSTRALIA

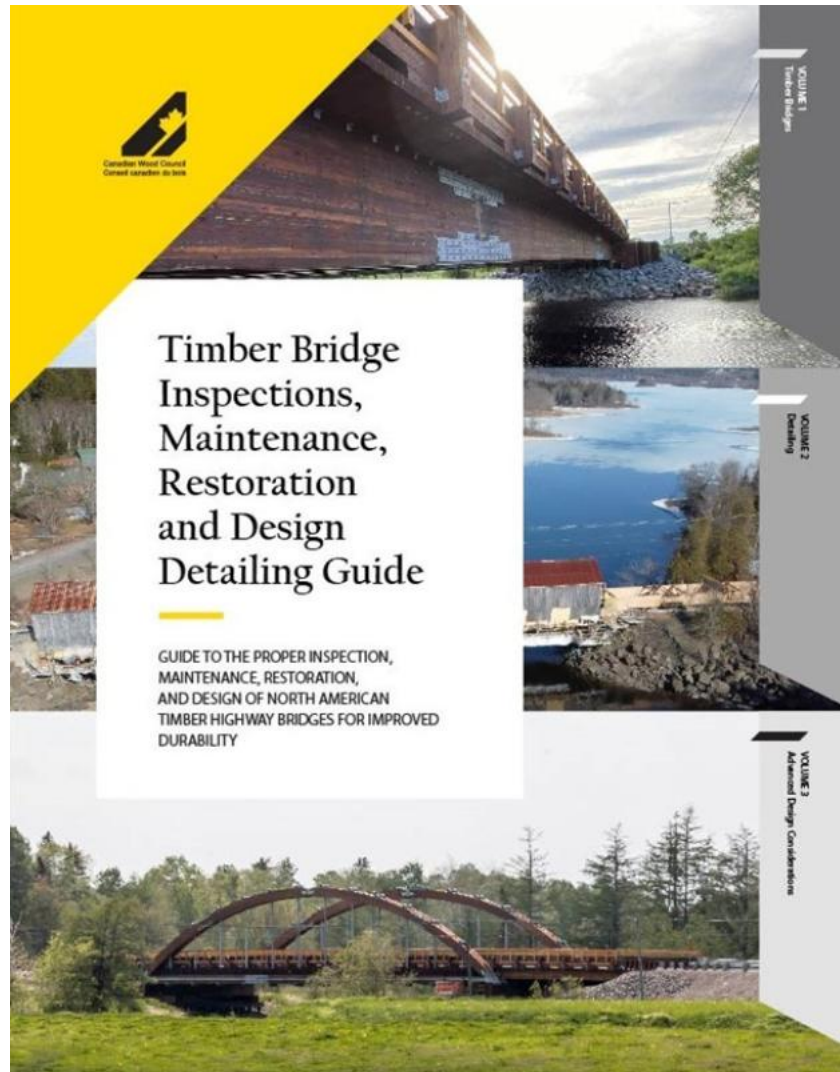
- **BPEQ – Board of Professional Engineers QLD**
- **AUS EA – Engineers Australia, National Engineering Register (NER)**
- **IPWEAQ – Institute of Public Works Engineering Australia Queensland**
- **Engineers VIC**
- **myCAV – Victoria Consumer Affairs**

NEW ZEALAND

- **IPENZ – Engineering New Zealand**

PUBLICATIONS AND BOOKS:

- Canadian Wood Council Textbook; Timber Bridge Inspections, Maintenance, Restoration and Design Detailing Guide.



- **AREMA Conventional Maintenance Practices for Railway Bridges**

Compendium of Maintenance Practices for Railroad Bridges



Prepared by

Dan Tingley Ph.D., P.Eng.,

Subcommittee 4 Chairman - Repair Manual, Construction & Maintenance, AREMA Committee 10

and

Nila Abubakar, PE

Willie Benton, PE

Hans Erickson, PE

Garth Fallis, P. Eng.

David Franz, PE

James Lee Hostler, PE

Dan Tingley, Ph.D. | P.Eng.

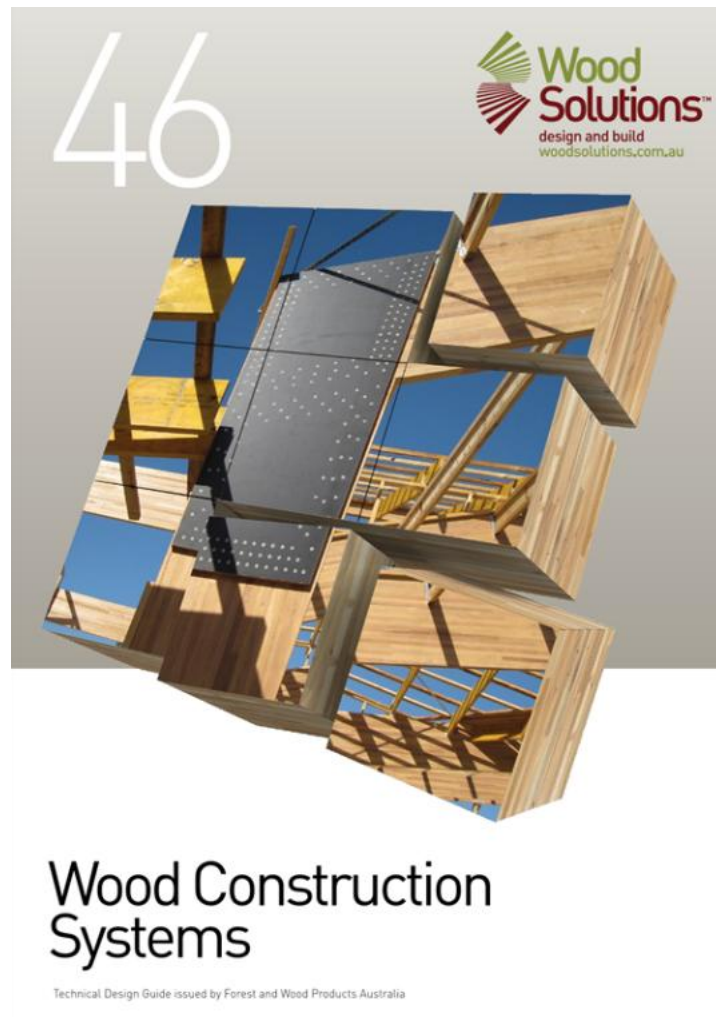
Phillip Trigg

Ross White, PE

November 20, 2023

This handbook has been developed to serve as a resource for a new AREMA seminar series on Maintenance of Railway bridges.

- **Guide to Wood Construction Systems Guide 46 Australia**



- **McGraw Hill Text. Structural Renovations**
- **More than 1000 timber structures documents including:**
 - **Published Research Papers**
 - **Trade Magazine Articles**
 - **Research Paper Reports**

SPECIAL AWARDS, PRIZES, DECORATIONS:

- **2022 - WoodWorks Atlantic top award for all wooded products in Eastern Canada**
- **2022 - WoodWorks Atlantic Jurors award for Roger Bacon Bridge**

- **2022 - WoodWorks Atlantic Wood Champion Award**
- **2021 - Albert County Chamber of Commerce Business Excellence Award – Environmental Stewardship**
- **1997 - CIF “Nova” Award for Innovation (worldwide competition all construction products. Only person to win NOVA and Charles Pankow Awards back-to-back, only person to win both awards in wood and high strength fibers)**
- **1996 - Applied Science Technologists & Technicians of British Columbia (ASTTBC) Award for advanced technology (worldwide competition).**
- **1996 - Civil Engineering Research Foundation (CERF) Charles Pankow Innovative Applications Award (worldwide competition only structural products).**
- **1993 - Association of Professional Engineers of Nova Scotia design award for designing the “Hector Heritage Quay,” an all-timber connector building with adjustable base connectors creating fixed end moment connectors in a green wood situation.**
- **1993 - Advanced Material Center, Oregon State University, \$3,000.00 scholarship for graduate study.**
- **1992-94 - Graduate Fellowship for three years to complete Ph.D. at Oregon State University**
- **1988 - Nova Scotia Architects Association Innovation in Engineering Award (Timber frame distillery).**
- **1982-83 - Association of Professional Engineers of New Brunswick, post graduate studies scholarship (two consecutive years).**