

Thomas R. Wood **Curriculum Vitae**

Education

Studied at Glasgow University and Royal Technical College, Scotland, majoring in Metallurgy. Course included chemistry, engineering subjects, physics, and geology.

Graduated 1949, Bachelor of Science (B. Sc.)

Professional Registration

1957 - Registered as a Professional Engineer in the Province of Ontario.

1987 - Designated as a Consulting Engineer by the Council of the Association of Professional Engineers of Ontario.

Technical Affiliations

Life Member - American Society for Metals

Work Experience in U.K.

1949 to 1952

Military Service

Sergeant Instructor in the Education Branch of the Royal Air Force.

1952 to 1955

Research Assistant at Colvilles Ltd., Clyde Iron Works, near Glasgow, Scotland. Dealt with problems concerning the operation of blast furnaces and ancillary equipment.

1955 (April)

Emigrated to Canada

Work Experience in Canada

1955 (May) to 1956 (November)

Metallurgical Assistant at Atlas Steels Ltd., Welland, Ontario.

Various duties relating to the production, processing, heat treatment and quality control of stainless steels and alloy steels.

1956 to 1982

Ontario Research Foundation, commencing as a Research Associate.

Progressed to the position of Senior Research Engineer, Department of Metals, Glass and Ceramics, in charge of the Mechanical Testing Laboratory and the Metallography Laboratory.

Projects included:

The study of the properties of Metallic and non-metallic materials under various conditions of stress and temperature;

Development of steels for special applications;

Fatigue properties of metals;

Magnetic concentration of iron ores;

Explosive welding;

High velocity forming processes;

Powder metallurgy.

During the period from 1967 to 1982, specialized in failure analysis.

Investigated failures of:

Industrial boilers;

Pressure vessels;

Automotive components;

Industrial machinery;

Fans;

Fastening devices;

Pipelines (gas, water, oil);

Cranes;

Domestic appliances;

Safety equipment, etc.

1982 to 1993

Director of Laboratories at Forensic Engineering Inc., Burlington, Ontario.

Conducted engineering for the insurance and law professions in matters concerning:

Machinery failures;

Motor vehicle accidents;

Bicycle accidents;

Elevating equipment (cranes, elevators, hoists, jacks etc.);

Plumbing failures, (pipes, water heaters, valves and pumps);

Burst boilers;

Pressure vessels;

Paper mill equipment;

Corrosion Damage;

Fire extinguishing equipment;

Shipments damaged in transport;

Playground equipment and children's playthings;

Household appliances;

Furniture (chairs, water beds, hospital beds, children's beds, wall cupboards, filing cabinets);

Burst bottles and leaking containers (glass, plastic and metals);

Personal injuries, (ladder accidents, falls on stairs, ramps and slippery surfaces);

Fastener failures (bolts, screws, nails, hooks, chains, ropes, clips), etc

1993 to 2002

Private practice.

Continuing in the same fields of endeavour as previously, serving industry, the insurance and law professions, and other consulting engineers in matters concerning metals and other materials, especially in the analysis of failures.

2002 to present

Metallurgical consultant at Origin And Cause Inc., Ancaster, Ontario.

Additional Professional Activities

Given evidence as an expert witness in all levels of court in Ontario, in the Supreme Court of British Columbia, and in the United States Federal District Court, Tennessee.

Attended several courses and seminars on the subject of Failure Analysis, at various locations throughout Canada and the United States. Written and presented papers at several of these seminars.

Attended a seminar on Slip/Fall Accidents, sponsored by the National Academy of Forensic Engineers, at Minneapolis, Minnesota.

Conducted a course in Failure Analysis at Mohawk College, Hamilton, Ontario.

Guest lectured on the subject of Failure Analysis at to 4th year students of metallurgy at the University of Toronto.