

basic studies on the use of high-frequency heating and its uses, including investigations on its application to bonding in gluing operations and the production of curved plywood shapes.

Containers: Generally, the design and testing of containers and the assessment of their suitability for carrying intended loads; the study of handling and transit hazards; supplying of technical data for container codes and studies aimed at improving container design.

WOOD PRESERVATION AND PATHOLOGY

Preservation: Treatment of wood with preservatives by pressure and non-pressure methods; ground-line treatments; service tests; chemical analyses of treated timber; determination of the efficacy of new preservatives; treatment of timber against attacks by insects and marine organisms; durability tests on treated wood by laboratory techniques and in service installations.

Pathology: The study of wood-destroying and wood-staining fungi, including their identification and their effect on the serviceability of timber, and methods of control; identification and life history of fungi, stain, and moulds; durability tests of untreated wood by wood-soil and other accelerated laboratory techniques.

Wood Paints and Coatings: Investigations on the use and composition of paints and other forms of surface coatings applied to wood; durability of exterior coatings on wood; effect of various factors, such as timber species, moisture content of wood, and resin content on surface coatings; fire-retardant paints and coatings.

WOOD UTILIZATION

Logging and Milling: Studies pertinent to the production of lumber and other primary manufacturing products; investigation of production methods and equipment with a view to more complete utilization; research into possible conversion to economic use of material now discarded; investigation of the benefits from closer integration of wood-using industries; operation of a research sawmill. Of necessity, these studies are undertaken in logging operations and at the sawmills and factories of co-operating industrial companies which have been selected as being representative of the manufacturing region or forest area being investigated.

Secondary Wood-using Industries: Research into the secondary wood-using industries, aimed at developing more effective utilization and reducing incident waste; investigations initiated with a view to determining new outlets for Canadian woods, and particularly for hardwoods; studies of forest products economics.

Lumber Seasoning: Investigations into the theory and techniques of lumber seasoning, including air-drying, kiln-drying, and other methods; research and experimentation to secure data for the preparation of kiln-drying schedules; studies pertinent to seasoning practices in industry aimed at developing improved methods of drying; organized kiln-drying and lumber seasoning courses of instruction.

WOOD CHEMISTRY

Chemical Utilization and Organic Chemistry: Investigations and experimental production of fibreboard, wallboard, and binder board from wood waste; studies aimed at the production of improved wood; research into the production of tannins from the bark of Canadian wood species; studies on the chemical composition of wood and on the chemistry of wood, carbohydrates, lignin, and bark; research and experimentation into the production and properties of cellulose from sawdust; investigations of the extractives from wood.