

Level	Reference	Description	Dates	Admin History	Scope & Content
Collection	2005.73	Electrical Research Association council and committee minute books and binders, with indexes, 1913-1962	1913-1962	ERA was founded in 1920 funded jointly by the Department of Scientific & Industrial Research, industry and member companies. Prior to ERA, there had been no real facility for co-operative electrical research in the UK, although some research was carried out by a few manufacturers, suppliers and larger users of electricity. ERA filled the recognised gap in the organisation of the industry, by supplying research and technology innovation. During the 1939-1945 war, direct assistance to the war effort was given by ERA, having been recognised by the Ministry of Labour in 1941 as an 'essential undertaking'. Activities during the war included working on the development of radar and mine detection equipment. Major new laboratories and offices were opened in Leatherhead, Surrey in 1957 which have remained the headquarters of the organisation ever since. Until the late 1960s, ERA had derived much of its income from member company subscriptions and UK government grants. After 1969 ERA began reorganising its mode of operation to reflect the rapidly changing technology base within the industries it served. This enabled the company to derive income from single client and multi-client projects. ERA became the first 'privatised' research association. In September 1979 ERA formally changed its name from The Electrical Research Association Ltd to its present name, ERA Technology Ltd. During the 1970s, 1980s and 1990s ERA continued to grow and develop into new research areas, including RF technology and electronic systems. It also expanded into providing a wide range of engineering consultancy services for mechanical as well as electronic and electrical systems. In doing so it established itself as one of Britain's leading independent consulting organisations at the leading edge of technology development. In January 2001, the entire organisation was transferred to a new trading company, limited by shares. The original company, still limited by guarantee, was renamed The ERA Foundation. The trading operation, retaining the name ERA Technology, was run as a wholly commercial enterprise, responsible to its shareholders.	The Electrical Research Association collection is made up of five series': Council minutes, research, indexes, a volume combining council minutes and research, and miscellaneous. The research minutes constitute the main body of the collection and make up thirty sub-series' of various research. For the research, the sub-series' reflects the particular area of research led by a 'section' - from A-Z - of scientists/researchers. These sections were further made up of various sub-committees and panels, formed to conduct more specific research into that particular area, and are similarly titled by letter, with the exception of the very earliest minutes. Discussing issues limited to the areas of finance, budgets, personnel etc, the council minutes do not require a sub-series'. The number of items (volumes), notably within the research series, reflects the large amount of research that was conducted by the Association. With the exception of five spring-back binders, the collection is made up entirely of red bound volumes of minutes which run chronologically from 1913 and end in 1962.
Series	2005.73/1	Research			Contains 30 Sub-Series' of research
Sub-series	2005.73/1/1	Fibrous Insulating Materials: Section A			26 Items of research covering the period 1913-57
Item	2005.73/1/1/1	Fibrous materials research panel (name changes to reflect changing subject interest - fibrous insulators; fibrous insulating materials (section A); fibrous materials, varnishes and compounds (section A))	1916-34		
Item	2005.73/1/1/2	Fibrous Materials Sub-Panel (later referred to in the volume as Fibrous Insulating Materials) Various Sub-Committees: Sub-Committee A: Fabrics Untreated and Treated; B: Papers, Untreated and Treated; D: Hard Fibres and Insulating Boards and Tubes; G: Electric Strength Tests; C: Varnishes	1917-22		
Item	2005.73/1/1/3	Various sub-committees:sub-committee C: Varnishes; D: Hard-Fibre and Insulating Boards and Tubes; B: Papers; A: Fabrics; H: Asbestos Products; J: Cellulose Acetate Products	1922-24		
Item	2005.73/1/1/4	Various sub-committees:sub-committee A: Fabrics; J: Cellulose Acetate Products; H: Asbestos Products; D: Hard-Fibre and Insulating Boards and Tubes; C: Varnishes; B: Papers	1924-25		
Item	2005.73/1/1/5	Various sub-committees:sub-committee B: Papers; D: Hard-Fibre and Insulating Boards and Tubes; C: Varnishes; H: Asbestos Products; A: Fabrics; J: Cellulose Acetate Products	1925-26		
Item	2005.73/1/1/6	Various sub-committees:sub-committee XA: Confidential Research on Varnishes; XB: Confidential Research on Capacitors	1925-45		

Item	2005.73/1/1/7	Various sub-committees:sub-committee D: Hard-Fibre and Insulating Boards and Tubes; A: Fabrics; B: Papers; J: Silk and Silk Substitutes; C: varnishes; H: Asbestos Products; E: Enamelled Wire	1926-27		
Item	2005.73/1/1/8	Various sub-committees:sub-committee H: Asbestos Products; D: Hard-Fibre and Insulating Boards and Tubes; A: Fabrics; E: Enamelled Wire; B: Papers; C: Varnishes	1927-28		
Item	2005.73/1/1/9	Now referred to at this point in the sub-series as Fibrous Insulating Materials, Varnishes and Compounds - Various sub-committees:sub-committee C: Varnishes; A: Fabrics; D: Hard-Fibre and Insulating Boards and Tubes; B: Papers; E: Enamelled Wire; H: Asbestos Products; J: Silk and Silk Substitutes	1928-29		
Item	2005.73/1/1/10	Various sub-committees:sub-committee B: Papers; D: Hard-Fibre and Insulating Boards and Tubes; A: Fabrics; C: Varnishes; E: Enamelled Wire; H: Asbestos Products	1929-31		
Item	2005.73/1/1/11	Various sub-committees:sub-committee A: Fabrics; B: Papers; D: Hard-Fibre and Insulating Boards and Tubes; J: Silk and Silk Substitutes; C: Varnishes; E: Enamelled Wire; H: Asbestos Products	1931-32		
Item	2005.73/1/1/12	Various sub-committees:sub-committee A: Fabrics; D: Hard-Fibre and Insulating Boards and Tubes; C: Varnishes; B: Papers; E: Enamelled Wire; J: Silk and Silk Substitutes; H: Asbestos Products; Various Panels: Panel Da: Vulcanised Fibre	1932-33		
Item	2005.73/1/1/13	Various sub-committees:sub-committee C: Varnishes; A: Fabrics; D: Hard-Fibre and Insulating Boards and Tubes; B: Papers; H: Asbestos Products; E: Enamelled Wire; J: Silk and Silk Substitutes; Various Panels: Panel Da: Vulcanised Fibre; Ca: Filling Compounds for Cable	1934-35		
Item	2005.73/1/1/14	Various sub-committees:sub-committee C: Varnishes; D: Hard-Fibre and Insulating Boards and Tubes; B: Papers; A: Fabrics; E: Enamelled Wire; H: Asbestos Products; K: Cellulose Derivative and other Films; Various Panels: Panel Ca: Filling Compounds for Cable Boxes; Da: Vulcanised Fibre; Ba: Cellulose Acetate Films	1935-36		
Item	2005.73/1/1/15	No Sub-Committees or Panels named: Minutes of research on: Papers, Fabrics, Boards and Tubes; Enamelled Wire, Asbestos Products; Silk and Silk Substitutes; Varnishes and Compounds; Cellulose Derivative and Other Films; Various minutes on the	1935-49		
Item	2005.73/1/1/16	Various sub-committees: sub-committee B: Papers; C: Varnishes; D: Hard-Fibre and Insulating Boards and Tubes; A: Fabrics; E: Enamelled Wire; H: Asbestos Products; K: Cellulose Derivative and other Films; Various Panels: Panel Da: Vulcanised Fibre	1936-38		
Item	2005.73/1/1/17	Various sub-committees:sub-committee K: Cellulose Derivative and other Films; D: Hard-Fibre and Insulating Boards and Tubes; C: Varnishes; E: Enamelled Wire; B: Papers; A: Fabrics; Various Panels - Panel Da: Vulcanised Fibre; Hb: Heat Resisting Covered Conductors; Ha: Heat Resisting Fabrics	1937-39		
Item	2005.73/1/1/18	Various sub-committees:sub-committee C: Varnishes; A: Fabrics; D: Hard-Fibre and Insulating Boards and Tubes; B: Papers; K: Cellulose Derivative and other Films; E: Enamelled Wire. Various Panels - Panel Hb: Heat Resisting Covered Conductors; Ha: Heat Resisting	1939-42		
Item	2005.73/1/1/19	Now referred to in the remaining sub-series as Industrial Insulating Materials -Various sub-committees: sub-committee E: Enamelled Wire; D: Hard-Fibre and Insulating Boards and Tubes; A: Fabrics; K: Cellulose Derivative and Synthetic Polymer Films; C: Varnishes; H: Inorganic Fibrous Materials. Various Panels - Panel Ha: Heat Resisting Fabrics; Hb: Heat Resisting Covered Conductors; Cb: Specifications and New Types of Varnish	1942-45		

Item	2005.73/1/1/20	Various sub-committees: sub-committee C: Varnishes, Compounds and Waxes; D: Hard-Fibre and Insulating Boards and Tubes; B: Papers; K: Cellulose Derivative and Synthetic Polymer Films; A: Fabrics; E: Covered Winding Wires. Various Panels - Panel Cc: Filling Compounds; Cb: Specifications and New Types of Varnish; Ea: Enamelled Wires; Eb: Heat Resisting Wires	1945-48		
Item	2005.73/1/1/21	Various sub-committees: sub-committee D: Hard-Fibre and Insulating Boards and Tubes; A: Fabrics; C: Varnishes, Compounds and Waxes; B: Papers; K: Cellulose Derivative and Synthetic Polymer Films. Various Panels - Panel Cb: Specifications and New Types of Varnish; Ea: Enamelled Wires; Cc: Filling Compounds	1948-50		
Item	2005.73/1/1/22	(Industrial Insulating Materials) - Various sub-committees:sub-committee M: Mica and High Temperature Insulating Materials; D: Fibrous Insulating Boards, Rods and Tubes; C: Varnishes, Compounds and Waxes; B: Papers; P: Plastics; K: Self-supporting Insulating Films and Extrusions. Various Panels - Panel Cb: Specifications and New Types of Varnish; Ea: Enamelled Wires; Cc: Filling Compounds; Ab: New Fabrics; Aa: Revision of BS 419	1950-52		
Item	2005.73/1/1/23	(Industrial Insulating Materials) - Various sub-committees: sub-committee D: Fibrous Insulating Boards, Rods and Tubes; P: Plastics; K: Self-supporting Insulating Films and Extrusions; A: Fabrics; C: Varnishes, Compounds and Waxes; B: Papers. Various Panels - Panel Aa: Revision of BS 419/Specifications for Varnished Cloth and Sleeving; Ea: Enamelled Wires; Cc: Filling Compounds; Cb: Specifications and New Types of Varnish; Eb: Heat resisting	1952-53		
Item	2005.73/1/1/24	(Industrial Insulating Materials) - Various sub-committees:sub-committee D: Fibrous Insulating Boards, Rods and Tubes; M: Mica and High Temperature Insulating Materials; K: Self-supporting Insulating Films and Extrusions; C: Varnishes, Compounds and Waxes; P: Plastics. Various Panels - Panel Aa: Specifications for Varnished Cloth and Sleeving; Cb: Specifications and New Types of Varnish; Ea: Enamelled Wires; Cd: Lac; Ab: New Fabrics	1953-55		
Item	2005.73/1/1/25	(Industrial Insulating Materials) - Various sub-committees:sub-committee D: Fibrous Insulating Boards, Rods and Tubes; P: Plastics; K: Self-supporting Insulating Films and Extrusions; M: Mica and High Temperature Insulating Materials. Various Panels - Panel Ab: New Fabrics; Cb: Specifications and New Types of Varnish; Cc: Filling Compounds; Cd: Lac; Aa: Specifications for Varnished Cloth and Sleeving; Ea: Enamelled Wires. Steering Panel on Thermal Endurance. Miscellaneous Minutes on: Chairmanship; Constitution of Committee; Organization; Terms of Reference; Approval of	1955-56		
Item	2005.73/1/1/26	(Industrial Insulating Materials) - Various sub-committees:sub-committee D: Fibrous Insulating Boards, Rods and Tubes. Various Panels - Panel Cb: Specifications and New Types of Varnish; Aa: Specifications for Varnished Cloth and Sleeving; Ea: Enamelled Wires; Db: Pressboard and Vulcanised Fibre; Dc: Laminates; Ab: New Fabrics; Da: Asbestos and Cement Boards; Eb: Fibre Covered Wires	1957		
Series	2005.73/1	Research			
Sub-series	2005.73/1/2	Minutes of Section B: Composite Insulating Materials			4 Items covering the period 1917-58
Item	2005.73/1/2/1	Ebonite Research panel (later renamed Composite materials panel; then to Section B: Composite Insulators/Composite Insulating Materials; then to Section B: Transmission of Power at High Voltages	1917-51		

Item	2005.73/1/2/2	Minutes of Composite Materials sub-panel/Ebonite and Composite Materials joint panel (later renamed Section B: Composite Insulators/Insulating Materials). Various Sub-committees - Sub-committee B: Tooling; A: General Research; E: Composites for use at Radio Frequencies; Composites for General Use	1918-33		
Item	2005.73/1/2/3	Various Sub-committees: sub-committee D: Composites for general Use; E: Composites for use at radio Frequencies; A: H.V. D.C. Transmission Scheme. Minutes of Section B: Transmission of Power at High Voltage. Various Panels - Panel A: Trial Scheme	1934-54		
Item	2005.73/1/2/4	Now referred to as Transmission of Power at High Voltages: Various Sub-committees - Sub-committee A: H.V. D.C. Transmission Scheme. Miscellaneous Minutes on: Review of Chairmanship and Personnel; Formation of Sub-committee; Reports issued and/or published; Prospective Research; Committee Papers; Patent Business; Proposed dates of future meetings	1954-58		
Series	2005.73/1	Research			
Sub-series	2005.73/1/3	Ebonite and Mica Panel			1 Item of research covering the period 1916-47
Item	2005.73/1/3/1	Minutes of the Ebonite and Mica Panel (later renamed Section D: Mica) - Various Sub-committees: sub-committee A: Mica and Micanite for Commutators; D: Micanite; C: Mechanical Tests/Properties. Panel Da: Chemical Tests on Mica	1916-47		
Series	2005.73/1	Research			
Sub-series	2005.73/1/4	Minutes of Section D: Flameproofness and Intrinsic Safety			2 Items of research covering the period 1955-59
Item	2005.73/1/4/1	Flameproofness and intrinsic safety - Various Sub-committees - Sub-committee A: Flameproof Enclosures; B: Intrinsic Safety; D/C: Flameproof Motors, Special Tests	1955-57		
Item	2005.73/1/4/2	Memo covering proposed Intensification of Ignition and Explosion Research in relation to Manufacture, Testing and Employment of Electrical Equipment for Use in Inflammable Industrial Atmospheres; Various conferences to discuss research on Flameproof Gear and Intrinsic Safety (28 April 1954; 26 October 1954; 15 February 1955; 14 March 1955; 20 September 1955); Various Sub-committees - G/H: Flameproof Motors, Special Tests (1952-1959); D/B Informal Panel: Classification of Gases for BS. 1259: 1958; B: Intrinsic Safety; A:	1952-59		
Series	2005.73/1	Research			
Sub-series	2005.73/1/5	Minutes of Section E: Insulating Oils			5 Items of research covering the period 1913-57
Item	2005.73/1/5/1	Various Sectional and Sub-committees - Sub-committee C: Specifications Proposals; A: Chemical and Physical Tests; B:	1913-24		
Item	2005.73/1/5/2	Various Sub-committees: sub-committee B: Electrical Tests; A: Chemical and Physical Tests. Panel Aa: Research for the IEC	1924-48		
Item	2005.73/1/5/3	Various Sub-committees: sub-committee A: Chemical and Physical Tests; B: Electrical Tests. Joint Panel of Sub-committees E/A and E/B: Code of Practice for Maintenance of Oil. Various Panels - Panel Ab: Investigations for IEC and CIGRE; Ba: Breakdown Voltage Test (later renamed Electric Strength Test)	1948-56		
Item	2005.73/1/5/4	Various Sub-committees: sub-committee B: Electrical Tests/Characteristics; A: Chemical and Physical Tests/Characteristics. Various Panels - Panel Ab: Investigations for IEC and CIGRE; Ac: Supervision of Field Trials; Ba: Electric Strength Test. Joint Panel of Sub-committees E/A and E/B: Maintenance of Insulating Oils. Miscellaneous minutes on finance; various research;	1952-56		
Item	2005.73/1/5/5	Various Sub-committees: sub-committee A: Chemical and Physical Characteristics; B: Electrical Characteristics. Various Panels - Panel Ad: Oxidation researches; Ab: Investigations for IEC and CIGRE	1956-57		
Series	2005.73/1	Research			
Sub-series	2005.73/1/6	Conductors			15 Items of research covering the period 1913-60

Item	2005.73/1/6/1	Minutes of Sub-Committee on Buried Cables. Research then turns to Conductors (Section F) - Sub-Committee B: Overhead Line Wires; A: General Research	1913-25		
Item	2005.73/1/6/2	Minutes of Section F: Conductors. Miscellaneous discussions on finance; personnel; various research; prospective research; terms of reference of future committees; constitution of committee, etc.	1925-31		
Item	2005.73/1/6/3	Various Sub-committees: sub-committee XA: Confidential researches on cables	1926-32		
Item	2005.73/1/6/4	Various Sub-committees: sub-committee B: Overhead Line Wires; A: General Research; C: Large Lamp Connections. Various Panels - Panel Ca: Critical Resume; Aa: Current Rating of Three Single Core	1929-31		
Item	2005.73/1/6/5	Various Sub-committees: sub-committee B: Overhead Line Wires; A: General Research; C: Large Lamp Connections; D: Earthing; F: Automatic Protective Systems; E: Copper Losses in Large Cables. Miscellaneous discussions on: finance; personnel; research; research to be undertaken; terms of reference of future committees; constitution of committee, etc. Various Panels - Panel Ab: Measurement of Power Factor of Cables; Ad: Thermal Properties of	1932-34		
Item	2005.73/1/6/6	Various Panels - Panel Aa: Current Rating of Cables; Ad: Thermal Properties of Soil; Ba: Vibration of Conductors. Various Sub-committees: sub-committee B: Overhead Line Wires; A: General Research; D: Earthing; F: Automative Protective System; G: Flameproof Lighting Fittings. Discussions on: finance, various research; research to be undertaken, etc.	1934-35		
Item	2005.73/1/6/7	Various Panels - Panel Aa: Current Rating of Cables; Ad: Thermal Properties of Soil; Da: Safety of Consumers; Aa: Current Rating of Cables; Db: Radio Interference Suppressors; Dc: Live Conductor Detectors; Bb: Routine Tests on Concrete Poles. Various Sub-committees: sub-committee A: General Research; D: Earthing; H: Research on Soil; B: Overhead Line Wires	1935-37		
Item	2005.73/1/6/8	Various Panels - Aa: Current Rating of Cables; Dc: Live Conductor Detectors; Bb: Routine Tests on Concrete Poles; Ae: Insulated Cables for use Outdoors. Various Sub-committees - Sub-committee A: General Research; D: Earthing; H: Research on Soil; B: Overhead Line Wires; C: Large Lamp Connections; J: Earthing to Water Mains.	1937-38		
Item	2005.73/1/6/9	Various Sub-committees: sub-committee B: Overhead Line Wires; A: General Research; C: Large Lamp Connections; H: Research on Soil; J: Earthing to Water Mains; K: Conductivity of Conduit Joints.	1938-42		
Item	2005.73/1/6/10	Various Panels - Panel Bb: Routine Tests on Concrete Poles; Da: Safety of Consumers; Ba: Vibration of Conductors; Bc: Research on Cadmium Copper Trolley Wires; Af: Short-Circuit Tests on Cables; Ag: Current Rating of Cables in Ships; Dd: Current Loading of Earth Electrodes; Dc: Live Conductor Detectors.	1939-53		
Item	2005.73/1/6/11	Various Panels - Panel Aa: Current Rating of Cables; Ag: Current Rating of Cables in Ships; Bb: Routine Tests on Concrete Poles/Stay Blocks; Af: Short-Circuit Tests on Cables. Various Sub-committees: sub-committee K: Conductivity of Conduit Joints; J: Earthing to Water Mains; B: Overhead Line Wires; A: General Research.	1942-45		
Item	2005.73/1/6/12	Various Sub-committees: sub-committee D: Earthing; A: Transmission and Distribution Cables; B: Cable Installations in Buildings. Various Panels - Panel Aa: Current Rating of Cables; Ah: Investigation on Cable at Early Power Station, Reading; Aj: Thermal Properties of Soil; Bb: Reinforced Concrete Poles and Stay Blocks; Af: Short Circuit Tests on Cables.	1945-54		

Item	2005.73/1/6/13	Various Sub-committees: sub-committee B: Overhead Line Wires; A: General Research. Minutes of Section F: Insulated Cables - Various Panels: Panel Ah: Investigation on Cable at Early Power Station, Reading; Aj: Thermal Properties of Soil; Aa: Current Rating of Cables; Ad Hoc Panel on Utilization of Power Cables. Various Sub-committees: sub-committee A: Transmission and Distribution Cables; B: Cable Installations in Buildings.	1946-56		
Item	2005.73/1/6/14	Minutes of Section F: now referred to as Insulated Cables - Various Sub-committees: sub-committee A: Transmission and Distribution Cables; F/A: Ad hoc Panel on Utilization of Power Cables; B: B: Cable Installations in Buildings. Various Panels: Panel Aa: Current Rating of Cables; Aj: Thermal Properties of Soil; Af: Short Circuit Tests on Cables. Minutes of Section V: Earthing, Safety and Circuit Problems - Sub-committee A: Earthing (Informal Panel on Earth-Leakage (Insulated Cables) Various Sub-Committees - Sub-Committee A: Transmission and Distribution Cables; B: Cable Installations in Buildings. Various Panels - Panel Aa: Current Rating of Cables; Af: Short Circuit Tests on Cables; Aj: Thermal Properties of Soil; F/A: Ad Hoc Panel on Utilization of Power Cables	1956-58		
Item	2005.73/1/6/15	Research	1958-60		
Series	2005.73/1	Research			
Sub-series	2005.73/1/7	Minutes of Section G: Electric Control Apparatus			10 Items of research covering the period 1921-58
Item	2005.73/1/7/1	Sub-Committee Minutes of Section G.	1921-58		
Item	2005.73/1/7/2	Various Sub-committees: sub-committee B: Mining Switch Gear; A: General Research; C: Heavy Duty Fusible Cut-Outs; E: Joints and Contacts; D: DC Circuit Breakers; F: Contactors. Panel Aa: Tests at Newcastle.	1921-31		
Item	2005.73/1/7/3	Minutes of Section G: Electric Control Apparatus: Sub-committee XA: Class B Research.	1930-34		
	2005.73/1/7/4	Various Sub-committees: sub-committee B: Mining Switchgear; E: Conductors, Joints and Contacts; F: Contactors, Motor Starters and Controllers; G: Flameproof Tests for Industrial Plant; C: Fuses.	1932-42		
Item	2005.73/1/7/5	Various Sub-committees: sub-committee XC: Heavy Duty Fusible Cut-Outs. Panel Xca: Experimental Work.	1934-38		
Item	2005.73/1/7/6	Sub-committee XA: Class B Research.	1936-45		
Item	2005.73/1/7/7	Various Sub-committees: sub-committee XA: Class B Research Circuit Breakers.	1945-50		
Item	2005.73/1/7/8	Electric Control Apparatus - Later renamed Switch and Control Gear . Various Sub-committees: sub-committee C: Fuses; F: Contactors, Motor Starters and Controllers.	1945-51		
Item	2005.73/1/7/9	Sub-committee XA: Circuit Breakers.	1951-58		
Item	2005.73/1/7/10	Various Sub-committees: Sub-Committee F: Contactors, Motor Starters and Controllers; C: Fuses; G/H: Flameproof Motors, Special tests; G: Flameproof Tests for Industrial Plant.	1952-57		
Series	2005.73/1	Research			
Sub-series	2005.73/1/8	Minutes of Section H: Corrosion of Metals			3 Items of research covering the period 1921-54
Item	2005.73/1/8/1	Minutes of Section H: Condenser Research including miscellaneous issues such as committee membership; budget; research in hand; confidential research; publicity; accounts; council personnel; prospective researches, etc. Sub-committee B+C: Heat Transmission; D: Ferrous Condenser Tubes.	1921-41		
Item	2005.73/1/9/1	Minutes of Section H: Condenser Research. Continuing on from Condenser Research are miscellaneous minutes on Constitution of Committee; Finance; Cooperation with other organisations.	1947-54		
Series	2005.73/1	Research			
Sub-series	2005.73/1/9	Minutes of Section J: Power Plant			1 Item of research covering the period 1947-54

Item	2005.73/1/9/1	Sub-committee E: Steels for High Temperatures; C: Properties of Steam. Various Panels - Panel Eb: Investigation of Cracking; Ec: Steam Pipes; Ed: Steering; Ee: Users. Section H: Condenser	1947-54		
Series	2005.73/1	Research			
Sub-series	2005.73/1/10	Minutes of Section K - Synthetic Resins			2 Items of research covering the period 1921-48
Item	2005.73/1/10/1	Miscellaneous discussions on finance, personnel, various research, research to be undertaken, terms of reference of future committees, constitution of committee, etc: No. 1 to 18 Various Sub-committees:- Sub-committee B: Varnish - Paper Boards and Tubes C: Synthetic Resin Mouldings A: Supplies. Also contains minutes of Section K: Electricity Supply Technology - Various Sub-committees: sub-committee B: Welding Supply; A: Cost Research; Domestic Supply; D: Fault Statistics; E: General Load Research.	1921-45		
Item	2005.73/1/10/2	Electricity Supply Technology - Various Sub-committees:- Sub-committee B: Welding Supply; A: Cost Research; C: Domestic Supply; F: Statistics of Tariff Structures. Panel Ca: Large-Scale Experiments.	1946-48		
Series	2005.73/1	Research			
Sub-series	2005.73/1/11	Minutes of Section L: Dielectrics in general			8 Items of research covering the period 1921-57
Item	2005.73/1/11/1	Various Sub-committees:- Sub-committee B: Thermal Resistivity; A: Dielectric losses; D: Electric Strength.	1921-36		
Item	2005.73/1/11/2	Miscellaneous discussions on finance, personnel, various research, research to be undertaken, terms of reference of future committees, constitution of committee, etc: No. 1 to 1-72 Various Sub-committees:- Sub-committee C: Effect of Heat on Dielectrics D: Electric strength.	1921-27		
Item	2005.73/1/11/3	Various Sub-committees:- Sub-committee E: Radio Frequency Tests; F: Condensers for Radio Receivers.	1926-47		
Item	2005.73/1/11/4	Various Sub-committees:- Sub-committee C: Effect of Heat on Dielectrics; D: Electric Strength; F: Condensers for Radio Receivers. Various Panels: Panel Da: Revision of ref. L/S2: miscellaneous discussions on finance, personnel, various research in hand, research yet to be undertaken, terms of reference of future committees, constitution of committee, etc: Nos 1-32 and 73-95.	1928-36		
Item	2005.73/1/11/5	Various Sub-committees:- Sub-committee C: Effect of Heat on Dielectrics; D: Electric Strength; H: Impulse Breakdown Phenomena. Also contains Miscellaneous discussions on finance, personnel, various research in hand, research yet to be undertaken, terms of reference of future committees, constitution of committee, etc: Nos 110-142. Various Panels: panel Dc: Impulse Breakdown Phenomena; Db: Electric Strength of Gases; Dd: Specific Breakdown Problems.	1936-43		
Item	2005.73/1/11/6	Various Sub-committees:- Sub-committee A: Dielectric losses; E: The relation between dielectric properties and solid structure; G: Electric Strength of Gases; H: Impulse Breakdown Phenomena; D: Electric Strength; K: Mechanical properties; F: Capacitors.	1941-53		
Item	2005.73/1/11/7	Various Sub-committees:- Sub-committee D: Electric Strength; K: Mechanical properties; H: Impulse Breakdown Phenomena; G: Electric Strength of Gases; J: Specific Breakdown Problems; F: Radio Condensers/Capacitors; E: The relation between dielectric properties and solid structure.	1943-48		
Item	2005.73/1/11/8	Various Sub-Committees:- Sub-committee K: Mechanical Properties D: Electric Strength G: Electric Strength of Gases E: The Relation between Dielectric Properties and Solid structures A: Dielectric losses F: Capacitors Miscellaneous discussions on finance, personnel, various research, research to be undertaken, terms of reference of future committees, constitution of committee, etc: No.	1953-57		
Series	2005.73/1	Research			
Sub-series	2005.73/1/12	Minutes of Section M: Wave FRCRH/Communication Interference			2 Items of research covering the period 1923-55

Item	2005.73/1/12/1	Various Sub-committees:- Sub-committee A: Investigation of Available Information - (Miscellaneous discussions on finance, personnel, various research, research to be undertaken, terms of reference of future committees, constitution of committee, etc): No. 1 to 9; sub-committee B: Distortion of Wave Form C: Inductive Interference D: Radio Interference by Electrical Equipment; Various	1923-38		
Item	2005.73/1/12/2	Various sub-committees: sub-committee D: Radio interference; C: Inductive interference/Wave form distortion in power systems and interference with line communication systems. Various Panels: ERA Panel on Subjective and Objective Assessment of Radio Interference. Informal Panel under sub-committee M/D: Subjective versus	1938-55		
Series	2005.73/1	Objective RI Tests; Subjective and Objective Assessment of Radio			
Sub-series	2005.73/1/13	Research Minutes of Section N: Magnetic Materials			1 Item of research covering the period 1933-57
Item	2005.73/1/13/1	Sub-committee B: Researches on Steel/Sheet Steel; C: Permanent Magnets	1933-57		
Series	2005.73/1	Research			
Sub-series	2005.73/1/14	Minutes of Section O: Overhead Lines			2 Items of research covering the period 1946-57
Item	2005.73/1/14/1	Various Sub-committees: sub-committee A: Conductors and Fittings; C: Supports and Foundations; B: Line Insulators and Fittings. Various Panels - Panel Ab: Trolley and Contact Wires; Ac: Electrical Characteristics of Overhead Lines; Aa: Vibration of Conductors.	1946-55		
Item	2005.73/1/14/2	Various Sub-committees: sub-committee A: Conductors and Fittings; C: Supports and Foundations; B: Line Insulators and Fittings.	1955-57		
Series	2005.73/1	Research			
Sub-series	2005.73/15	Primary Cells			1 Item of research covering the period 1925-28
Item	2005.73/1/15/1	Minutes of Section P	1925-28		
Series	2005.73/1	Research			
Sub-series	2005.73/16	Minutes of Section P: Grindability of Coal			1 Item of research covering the period 1946-52
Item	2005.73/16/1	(later discussed at sub-committee level - sub-committee A - while research area broadened and referred to as Problems Ancillary to Coal Combustion).	1946-52		
Series	2005.73/1	Research			
Sub-series	2005.73/1/17	Minutes of Section Q: Dynamos and Motors (Later renamed Transformers in 2005.73/1/17/2).			2 Items of research covering the period 1928-60
Item	2005.73/1/17/1	Various sub-committees - sub-committee B: Short-Circuit Stresses; D: Power Capacitors and Capacitor Transformers; A: Transformer Noise	1928-57		
Item	2005.73/1/17/2	Various Sub-committees - Sub-committee D: Power Capacitors and Capacitor Transformers; B: Short Circuit Stresses; A: Transformer Noise - Informal Panel appointed to consider future research; A:	1957-60		
Series	2005.73/1	Research			
Sub-series	2005.73/1/18	Minutes of Section R: Railway Engineering			1 Item of research covering the period 1931-38
Item	2005.73/1/18/1	Various Sub-committees; Sub-committee A: Corrosion and Insulation; B: Overhead Construction; C: Conductor Rails.	1931-38		
Series	2005.73/1	Research			
Sub-series	2005.73/1/19	Minutes of Section S: Surge Phenomena			3 Items of research covering the period 1933-58
Item	2005.73/1/19/1	Various sub-committees - sub-committee B: Surges in Supply Systems and Protective Apparatus; A: Transients in Transformers. Panel Ba: Lightning Currents	1933-49		
Item	2005.73/1/19/2	Various sub-committees - sub-committee C: Impulse Breakdown Phenomena; B: Surges in Supply Systems; A: Transients in Transformers; Panel Bb: Lightning Fault Statistics	1950-57		
Item	2005.73/1/19/3	Various sub-committees - sub-committee C: Impulse Breakdown Phenomena; B: Surges in Supply Systems; A: Transients in Transformers; Panel Bb: Lightning Fault Statistics	1957-58		
Series	2005.73/1	Research			

Sub-series	2005.73/1/20	Minutes of Section T (Section XT for 2005.73/1/20/1): Integrating			2 Items of research covering the period 1932-57
Item	2005.73/1/20/1	Integrating Meters	1932		
Item	2005.73/1/20/2	Integrating Meters	1933-57		
Series	2005.73/1	Research			
Sub-series	2005.73/1/21	Minutes of Section U: Glass Insulators/Electric Equipment of Automative Systems.			2 Items of research covering the period 1933-54
Item	2005.73/1/21/1	Sub-committee A: General Research. Panel Aa: Power Line	1933-47		
Item	2005.73/1/21/2	Various sub-committees - Sub-committee A: Ignition Spark Discharges; B: Contact Operation and Materials. Miscellaneous: Chairmanship; Constitution of Committee; Organization; Terms of Reference; Approval of Programmes	1947-54		
Series	2005.73/1	Research			
Sub-series	2005.73/1/22	Minutes of Section V: Safety Problems (later expanded to cover Earthing, Safety and Circuit Problems in 2005.73/1/22/5)			5 Items of research covering the period 1936-58
Item	2005.73/1/22/1	Various Sub-committees - Sub-committee A (later B): Fire Risks/Earthing; E: Incipient Breakdown of Insulation In Service; C: Automative Protective Systems; D: Network Analysers. Various Panels - Panel Ac: Earthing to Water Mains; Ad: Conductance of Earth Continuity Conductors; Ae: Earth Continuity Measurements; Aa: Earth Electrodes and Electrical Properties of Soil; Ab: Economics of	1936-48		
Item	2005.73/1/22/2	Various Sub-committees - Sub-committee A: Earthing; E: Incipient Breakdown of Insulation In Service; B: Fire Risks; D: Network Analysers. Various Panels - Panel Da: System Constants; Ad: Conductance of Earth Continuity Conductors; Ae: Earth Continuity	1949-53		
Item	2005.73/1/22/3	Various Sub-committees - Sub-committee A: Earthing; E: Incipient Breakdown of Insulation In Service; B: Fire Risks; D: Network Analysers. Various Panels - Panel Da: System Constants; Ad: Conductance of Earth Continuity Conductors; Ac: Earthing to Water	1954-57		
Item	2005.73/1/22/4	(Contains minutes of Section F - 2005.73/1/6/13). Sub-committee A: Earthing (Informal Panel on Earth-Leakage Protection)	1956-58		
Item	2005.73/1/22/5	Various Sub-committees - Sub-committee A: Earthing; E: Incipient Breakdown of Insulation In Service; D: Network Analysers. Various Panels - Panel Da: System Constants; Ac: Earthing to Water Mains	1957		
Series	2005.73/1	Research			
Sub-series	2005.73/1/23	Minutes of Section W: Rural electrification			3 Items of research covering the period 1949-62
Item	2005.73/1/23/1	Various Sub-committees:- Sub-committee G: Horticultural Applications; H: Specialized Applications; E: Electrically Operated Barn and Field Equipment; F: Applications Concerned With Livestock; Panel Ba: Electrical Field Work	1949-52		
Item	2005.73/1/23/2	Various Sub-committees:- Sub-committee G: Horticultural Applications; H: Specialized Applications including Informal Panel on the Utilization of Waste Heat; E: Electrically Operated Barn and Field Equipment; F: Applications Concerned With Livestock	1953-57		
Item	2005.73/1/23/3	Various Sub-committees:- Sub-committee G: Horticultural Applications; F: Applications Concerned With Livestock; E: Electrically Operated Barn and Field Equipment. Minutes of meeting discussing various research (20 May 1958; 29 May 1959; 26 May 1960). Research Advisory Committee 5J: Applications of Electricity to Horticulture 17 July 1962); 5H: Applications of Electricity to Agriculture	1960-62		
Series	2005.73/1	Research			
Sub-series	2005.73/1/24	Minutes of Section XN: Transformer Iron			1 Item of research covering the period 1924-32
Item	2005.73/1/24/1	Transformer Iron. (Also includes minutes of Section N: Magnetic Materials - see 2005.73/1/13/1)	1924-32		
Series	2005.73/1	Research			
Sub-series	2005.73/1/25	Minutes of Section XO: Instrument Springs			1 Item of research covering the period 1925-30
Item	2005.73/1/25/1	Instrument Springs	1925-30		

Series	2005.73/1	Research			
Sub-series	2005.73/1/26	Minutes of Section Y: Heating, Cooking and Allied Problems			2 Items of research covering the period 1925-57
Item	2005.73/1/26/1	Various Sub-committees - Sub-committee B: Space and Water Heating; C: Heat Pumps. Panel Ba: Heat Pump.	1940-53		
Item	2005.73/1/26/2	Various Sub-committees - Sub-committee B: Space and Water Heating; C: Heat Pumps	1954-57		
Series	2005.73/1	Research			
Sub-series	2005.73/1/27	Minutes of Section Z (later referred to as Section XZ: Unclassified Researches of General Interest): Unclassified/Confidential			3 Items of research covering the period 1925-57
Item	2005.73/1/27/1	Sub-committee XA: Confidential Researches	1925-29		
Item	2005.73/1/27/2	Various Sub-committees - Sub-committee A: Heating and Cooking Apparatus; B: Voltage Variation; C: Transformer Noise; D: Alloys for Heating Elements; E: Space Heating; F: Storage and Generation of Electrical Energy; H: The Welding Arc. Panel Ba: Appraising Voltage Variation	1931-50		
Item	2005.73/1/27/3	Various Sub-committees - Sub-committee H: The Welding Arc; F: Storage and Generation of Electrical Energy; B: Fixed Resistors; C: Rotating Electrical Machines; Z: Measurement of Current and Voltage on HV Systems; Z/F: Storage and Generation of Electrical Energy (Informal Panel - Lead Acid Cells). Also, Research on Joints between Conductors on Power Supply Systems.	1950-57		
Series	2005.73/1	Research			
Sub-series	2005.73/1/28	Magnet Steel			1 Item of research covering the period 1913-19
Item	2005.73/1/28/1	Various Sub-Committees	1913-19		
Series	2005.73/1	Research			
Sub-series	2005.73/1/29	BIOS			1 Item of research covering the period 1946-48
Item	2005.73/1/29/1	Ceramics Committee; HV DC Transmissions - Various Panels: Panel B: Tests on Model Paint; C: Rectifiers and Mutating Equipment; A: Economics of Transmission.	1946-48		
Series	2005.73/1	Research			
Sub-series	2005.73/1/30	Gas Turbine Research			1 Item of research covering the period 1948-49
Item	2005.73/1/30/1	Ad hoc conference	1948-49		
Series	2005.73/2	Council Minutes			Series made up of 19 Items, without variable content, covering the period 1921-54
Item	2005.73/2/1	Council Meetings/Finance Sub-committee (including extract from condition of grant from (central) Government). Also included are Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches, etc)	1921-23		
Item	2005.73/2/2	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Also, minutes of various Finance Sub-committees, and minutes from a Patents Sub-Committee.	1925-27		
Item	2005.73/2/3	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1927-29		
Item	2005.73/2/4	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1931-32		
Item	2005.73/2/5	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1933-34		

Item	2005.73/2/6	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1934-37		
Item	2005.73/2/7	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1937-39		
Item	2005.73/2/8	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1939-41		
Item	2005.73/2/9	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1941-43		
Item	2005.73/2/10	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff). Various Finance Committees.	1943-45		
Item	2005.73/2/11	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support). Includes minutes of various Finance Sub-committees.	1945-47		
Item	2005.73/2/12	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support).	1947-50		
Item	2005.73/2/13	Various finance committees	1947-51		
Item	2005.73/2/14	Council Minutes: AGM's	1949-59		
Item	2005.73/2/15	Minutes of meetings on miscellaneous issues (Membership; budget; research in hand; publicity; accounts; council personnel/staff; prospective researches; requests to Electricity Commissioners for support).	1950-55		
Item	2005.73/2/16	Various meetings on: Council Membership; Associate Membership; Prospective Researches; Finance; Publishing; External Relations; Receipt of Committee Reports; Future Conduct of the ERA; various	1955-57		
Item	2005.73/2/17	Council meetings: various finance sub-committees	1954-56		
Item	2005.73/2/18	Council meetings: Finance Committee	1957		
Item	2005.73/2/19	Various finance committees	1951-54		
Series	2005.73/3	Indexes			Series of 2 Items covering the period 1947-60
Item	2005.73/3/1	Confidential Reports	1947-1960		
Item	2005.73/3/2	Various Reports	1920-1950		
Series	2005.73/4	Miscellaneous			1 Item covering the year 1915
Item	2005.73/4/1	Minutes of sub-committee on Current Densities: reference to future research	1915		
Series	2005.73/5	Council Minutes and Research			1 Item covering the year 1951
Item	2005.73/5/1	Ad hoc Panel of Council - HVDC Transmission: Points relating to terms of reference to the panel; Scope of the technical proposals; Finance; Commercial advantages of completion of the scheme; the organization of any prospective scheme. Research by Ad hoc Committee on Rectifiers for Service at Sea.	1951		

