## Helen Megaw, crystallographer: papers, 1937 - 1977

### Introduction and summary description

Creator: Helen Megaw Reference: AAD/1977/3

**Extent:** 59 files

#### Context

Helen Megaw (1907 - 2002) read chemistry for her first degree and after completing a PhD obtained a post as a crystallographer at Girton College, Cambridge. In the 1940s she began to use crystal structure diagrams as a basis for decoration. In 1949 Mark Hartland Thomas, chief industrial officer of the Council of Industrial Design, liaised with Megaw about her design work. She was subsequently appointed scientific consultant to the Festival Pattern Group for the Festival of Britain, 1951.

The Festival Pattern Group worked on the Crystal Design Project which involved 28 manufacturers representing the cutlery, glass, paper, pottery and textile industries. They used patterns on their products derived from crystal structure diagrams which were supplied by Megaw and her scientific colleagues, including those from china clay, haemoglobin and insulin. Many of the motifs were used on furnishings and tableware in the Regatta Restaurant at the Festival of Britain in 1951.

#### Scope and content

Designs, drawings and photographs of crystal structures (1937 - 1977); instrument catalogues (1945); correspondence, draft articles and press cuttings relating to crystal formations and design (1945 - 1962); Festival Pattern Group minutes (1949 - 1951); correspondence with scientists (1949 - 1953); publications produced by the Committee of the Festival of Britain (1951); correspondence relating to samples of crystal structure designs from the 1960 International Congress of Crystallography (1951 - 1960).

#### **Provenance**

Given by Helen Megaw, 1977

#### Access

This archive is available for consultation in the V&A Archive and Library Study Room, which is located at Blythe House, 23 Blythe Road, Olympia, London, W14 0QX. The Study Room is open Tuesday to Friday between 10.00 am and 4.30 pm, by appointment only. To request an appointment please email archive@vam.ac.uk or telephone 020 7603 7493. Access to some files may be restricted; these are identified individually with the catalogue.

#### **Restrictions on use**

For conservation reasons the photocopying of archival material is not permitted. Archives may be photographed for study purposes only, at the discretion of the archivist.

#### **Related Material**

#### Archive and manuscript sources

Textiles & Dress Collection, holds a jacket and length of furnishing fabric given by Dr. Megaw.

See also AAD/1979/5 Festival of Britain publicity material and film; AAD/1980/3 Misha Black, industrial and exhibition designer and architect: archive; AAD/1988/18 Central Office of Information Photographs Division: the Festival of Britain collection; AAD/1994/10 Festival of Britain printed ephemera, photographs and publications; AAD/1994/9 George Backhouse, former Chief Executive Officer, Personnel and Organisation, Festival of Britain: papers.

#### **Detailed catalogue**

# Publications reporting, or produced by the Committee of the Festival of Britain, 1951

**Reference:** Megaw-1

Extent: 7 files

Reference	Description	Dates
AAD/1977/3/1	The souvenir book of crystal designs 1 item 16pp. illus	1951
AAD/1977/3/2	Cox, Ian. South Bank exhibition - a guide to the story it tells;. HMSO 1 item ca.100pp. illus	1951
AAD/1977/3/3	Festival of Britain - souvenir in pictures. News Chronicle 1 item ca.40pp. illus	1951
AAD/1977/3/4	Architectural Review; 1 item Contains: "The investigation of crystal structure" by Helen Megaw. pp.236-239. Vol. 109 No. 652. illus	1951
AAD/1977/3/5	British Textiles;. Fesitval of Britain and British Industries Fair number. 47th ed. 1 item Contains "Design - science reveals a new basis of textile design" (pp. 50-55). 159pp. illus	1951

AAD/1977/3/6 Homes and Gardens; Vol.32 No.11
1 item
Contains: "Design finds new themes" (pp.34-35). 120pp. illus

AAD/1977/3/7 Design;. No. 29-30
1 item
Contains: "Festival Pattern Group" by Mark Hartland Thomas (pp. 12-25). 40pp. illus

# Correspondence and papers relating to crystal structures and design, 1945-1962

**Reference:** Megaw-2

Extent: 32 files

Includes a draft article for the Design Research Unit, minutes of the Festival Pattern Group, and correspondence with designers and manufacturers.

Reference	Description	Dates
AAD/1977/3/8 to 35	Correspondence with the Design Research Unit and the Council of Industrial Design relating to the crystallography project 1 folder (29 items)	1945-1949
AAD/1977/3/36	"Patterns in crystallogrpahy" draft article. 1 folder Typescript. 13ff	ca. 1946
AAD/1977/3/37	"Patterns in crystallography" typescript notes and unfinished draft 28ff	ca. 1946
AAD/1977/3/38	Notes and draft for "Patterns in crystallography" 1 folder 20ff	ca. 1946
AAD/1977/3/39 to 54	Correspondence concerning crystallographic designs 1 folder (16 items)	1949
AAD/1977/3/55 to 64	Copyright position with regard to the crystallographic designs: correspondence 1 folder (10 items)	Nov 1949 - Jan 1950
AAD/1977/3/65 to 107	Correspondence relating to crystallographic designs, much dealing with individual designs 1 folder (43 items)	Jan 1950 - Mar 1951
AAD/1977/3/108 to 120	Papers and correspondence with Mark Hartland Thomas	Sept 1950 - ca. Apr 1951
	Correspondence mostly relates to revisions to his article for Design, and to publicity.	
AAD/1977/3/121	Two typed copies of Mark Hartland Thomas's article for <i>Design</i> ; 1 folder	1951

AAD/1977/3/122 to 157	Agenda and minutes of meetings of the Festival Pattern Group of the Council of Industrial Design 1 folder (37 items) Includes some correspondence giving details and dates of forthcoming	Dec 1949 - Apr 1951
AAD/1977/3/158 to 170	meetings.  Press release with lists of manufacturers co-operating with the Festival Pattern Group 1 folder (13 items) Includes notes on individual manufacturers.	1951
AAD/1977/3/171 to 240	Correspondence with the designers and manufacturers of crystallographic designs 1 folder (69 items)  Includes correspondence and papers relating to the selling and availability of the designs.	1950-1951
AAD/1977/3/241 to 245	Correspondence relating to the circulation of a free pamphlet 1 folder (5 items)	Aug 1951
AAD/1977/3/246 to 249	Correspondence relating to a propsed display at Liberty's 1 folder (4 items)	1951
AAD/1977/3/250	Letter from Ronald Dickens 1 folder (1 item)	29 Jan 1951
AAD/1977/3/251 to 252	Correspondence with the Cement Marketing Company Ltd 1 folder (2 items)	1951
AAD/1977/3/253 to 254	Correspondence with Warerite Ltd 1 folder (2 items)	1951-1952
AAD/1977/3/255 to 258	Papers and correspondence with the University of Birmingham 1 folder (4 items)	1962
AAD/1977/3/259 to 261	Correspondence with Alan-Bowen Ltd., industrial designers, Leamington Spa 1 folder (3 items)	1950-1951
AAD/1977/3/262	Letter from Ursula Block to Dr Megaw	24 July 1957
AAD/1977/3/263- 270	Correspondence, papers and one illustration of the Cunard Steamship Co. Ltd. 1 folder (8 items)	1953-1954
AAD/1977/3/271 to 272	Correspondence with Dewsbury Textile Society 1 folder (2 items)	1951
AAD/1977/3/273 to 276	Correspondence with the Incorporated Institute of British Decorators and Interior Designers 1 foler (4 items)	1959
	Includes one photograph of wallpaper designs.	
AAD/1977/3/277 to 285	Correspondence with London Typographical Designers Ltd. 1 folder (9 items)	1951-1956
AAD/1977/3/286 to 308	Papers and correspondence with Oxvar Ltd., London 1 folder (23 items)	1951-1955
AAD/1977/3/309- 310	Letter and sketch from Arthur Shepherd, Tailor of Cambridge 1 folder (2 items)	July 1960

AAD/1977/3/311 to 312	Correspondence with Tomkinsons Ltd, carpet manufacturers, Kidderminster 1 folder (2 items)	June 1951
AAD/1977/3/313 to 324	Correspondence with Vanners and Fennell Brothers Ltd., Sudbury 1 folder (12 items)	1954
AAD/1977/3/325 to 327	Correspondence with Dr William Mall, Washington University 1 folder (3 items)	1962
AAD/1977/3/328 to 331	Correspondence with J. A. Dunkin Wedd, consultant designer 1 file (4 items)	1955
AAD/1977/3/332 to 348	Correspondence with Peter Wall and Josiah Wedgwood & Sons Ltd.  1 folder (17 items)	1949-1952
AAD/1977/3/349 to 350	Correspondence with Henry Widnell and Stewart Ltd., carpet manufacturers, Midlothian 1 folder (2 items)	Mar 1960
AAD/1977/3/694 to 704	Correspondence with scientists wishing to obtain samples of designs and requests for addresses 1 folder (11 items)	1951-1953
	Information held in this file may not be published without permission.	
AAD/1977/3/705 to 734	Correspondence with scientists regarding the use of crystallographic diagrams plotted by them in designs 1 folder (30 items)  Information in this file may not be published without permission.	1949-1951
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# Papers and correspondence dealing with attempts to obtain samples of crystallographic designs frojm manufacturers for an International Congress of Crystallography held in Cambridge, 1960, 1951-1960

**Reference:** Megaw-3

Extent: 1 file

ReferenceDescriptionDatesAAD/1977/3/351 toPapers relating to obtaining designs for an International<br/>Congress of Crystallography1951-1960

1 folder (19 items)

## Catalogues of instruments for the study of crystal structures, ca. 1945

**Reference:** Megaw-4

Extent: 1 file

374

**Reference** Description Dates
AAD/1977/3/370 to Catalogues of the company of Seemann Laboratorium, ca. 1945

Frieburg, manufacturers of scientific and optical

equipment 1 folder (5 items)

## Articles from Nature;, 1937-1943

**Reference:** Megaw-5

Extent: 4 files

Reference	Description	Dates
AAD/1977/3/375	Wrinch, D.M. Dr. "The cyclol theory and the globular proteins". <i>Nature</i> ; Vol 139, p.972, illus. 1 folder	5 June 1937
AAD/1977/3/376	Langmuir, Irving, Dr. and Wrinch, Dorothy, Dr. "Vector maps and crystal analysis". <i>Nature</i> ;, Vol. 142, No. 3595 pp.581-583, illus 1 folder	24 Sept 1938
AAD/1977/3/377	Piley, D.P. "A derived patterson analysis" <i>Nature</i> ; Vol. 143 pp.648-649, illus. 1 folder	15 Apr 1939
AAD/1977/3/378	Boyes-Watson, Joy and Perutz, M. F. "X-ray analysis of Haemoglobin". <i>Nature</i> ; Vol.151 pp.714, illus. 1 folder	26 June 1943

# Designs, photographs and working drawings of crystal structures, ca. 1937-1977

**Reference:** Megaw-6

Extent: 10 files

Reference	Description	Dates
AAD/1977/3/379 to 419	Photographs of illustrations of crystal structures 1 folder (41 items)	ca.1937- ca.1946
AAD/1977/3/420 to 471	Miscellaneous workigng drawings of crystallographic structures, some annotated 1 folder (52 items)	ca.1946- ca.1951, 1977
AAD/1977/3/472 to 516	Diagrams and notes relating to the construction of patterns as maps of three dimensional structures 1 folder (46 items)	ca. 1947- ca.1951
AAD/1977/3/517 to 576	Miscellaneous illustrations of crystal structures in envelope inscribed "Duplicates and photo prints to be sent in (possibily to Crystal Pattern Group) 1 folder (61 items)	ca. 1946- ca.1951
AAD/1977/3/577 to 584	Photographs of designs (some executed in lace, textiles and wallpaper) exhibited at the Festival of Britain, with one photograph of the Regatte Restaurent which was the centre-piece for the display of Festival Pattern Decorations.  1 folder (8 items)  The photographs are annotated.	1951
AAD/1977/3/585 to 586	Photograph of a tea service with an envelope giving full description 1 folder (2 items)	ca. 1977

AAD/1977/3/587 to 606	Designs sent to Oxvar Ltd with folder 1 folder (74 items)	1952-1954
AAD/1977/3/661 to 664	Working drawings for paper for [cover?] booklet, with a sample of the finished design. Prepare for the IUC conference held in Cambridge in 1960 and published by Heffer's 1 folder (4 items)	ca. 1959- ca.1960
AAD/1977/3/665	Seeman, H. "Das Weitwinkeldiagram mit Rontgemoder Elktronenstrahlen". <i>Pysikalische Zeitschrift</i> ; Vol 16, pp.365-380, illus.  1 folder	1940

# Papers relating to articles published on crystal structure and design, 1951

**Reference:** Megaw-7

Extent: 2 files

Reference	Description	<b>Dates</b>
AAD/1977/3/666 to 678	Draft of an article by Helen Megaw, "The investigation of crystal structure" published in <i>Architectural Review</i> ; Vol. 109 No. 652 April 1951; correspondence relating to its publication, and one page of the proof. 1 folder (13 items)	1951
AAD/1977/3/679 to 684	Correspondence with F. H. K. Henrion of Futura Publications Ltd. concerning the publication of some designs in the June 1951 issue of <i>Futura</i> ; 1 folder (6 items)	1951

## Press cuttings regarding crystal designs, 1951-1952

**Reference:** Megaw-8

Extent: 1 file

Reference	Description	Dates
AAD/1977/3/685 to	Presscuttings reporting the designs to be used in the	1951-1952
693	Festival of Britain, and related subjects	
	1 folder (9 items)	