Series Outline

1. Correspondence and Non-Dunitz Publications, 1932-2009 undated
5. Research Notes and Notebooks, 1941-1989
6. Subject Files, 1927-2008
**Detailed Description of the Collection**

**Box**

1. **Correspondence and Non-Dunitz Publications, 1932-2009 undated (26 boxes)**

The folders in this series contain correspondence and publications by specific authors, as maintained by Dunitz. The correspondence materials include traditional letters as well as a large volume of emails and word processing files printed out over time by Dunitz. Highlights of the series include lengthy exchanges with a number of notable scientists including Carleton Gajdusek, Dorothy Hodgkin and Kenneth Trueblood. The activities of the Cambridge Crystallographic Data Centre are also well-documented in this series, as is Dunitz's work in preparing his *Biographical Memoirs of the Royal Society* article on Linus Pauling.

Access to the Cambridge Crystallographic Data Centre and the Royal Society correspondence in Series 1 is restricted due to the presence of confidential information. All requests for access to this material should be directed to the University Archivist.

<table>
<thead>
<tr>
<th>Subseries: Correspondence: A, 1976-2008 undated (16 folders)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Folder</strong></td>
</tr>
<tr>
<td>1.1 Abir-Am, Pnina, 2001</td>
</tr>
<tr>
<td>1.2 Abrahams, Sidney C., 1982 2000</td>
</tr>
<tr>
<td>1.4 <em>Accounts of Chemical Research</em>, 1994-1995 undated</td>
</tr>
<tr>
<td>1.6 Allinger, Norman L., 1992 1997 1999</td>
</tr>
<tr>
<td>1.7 American Academy of Arts and Sciences, 1997</td>
</tr>
<tr>
<td>1.10 American Philosophical Society, 1997-1998</td>
</tr>
<tr>
<td>1.12 Anwar, Jamshed, 2005</td>
</tr>
<tr>
<td>1.13 Arrhenius, Gustav, 1992 2008</td>
</tr>
<tr>
<td>1.14 Auf der Hyde, Thomas, 1990-1994</td>
</tr>
<tr>
<td>1.15 Avnir, David, 1992-1996</td>
</tr>
<tr>
<td>1.16 A: General Correspondence,</td>
</tr>
</tbody>
</table>

1.003 Correspondence: Be - Bo, 1960-2004 (10 folders)

<table>
<thead>
<tr>
<th>Folder</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Benner, Steven, 2004</td>
</tr>
<tr>
<td>3.3 Bijvoet, Johannes Martin, 1967-2001 [Includes portrait of Bijvoet, dated 1961.]</td>
</tr>
<tr>
<td>3.4 <em>Biopolymers</em>, 1997</td>
</tr>
<tr>
<td>3.5 Blow, David M., 2002</td>
</tr>
<tr>
<td>3.7 Boldyrev, Elena, 1991-1993</td>
</tr>
<tr>
<td>3.8 Boll-Dornberger, Kate, 1963-1967</td>
</tr>
<tr>
<td>3.9 Bombicz, Petra, 2001-2002</td>
</tr>
<tr>
<td>3.10 Boorstin, Daniel, 1999</td>
</tr>
</tbody>
</table>

1.004 Correspondence: Br - Bu, 1954-2004 (9 folders)

<table>
<thead>
<tr>
<th>Folder</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Braga, Dario, 2001</td>
</tr>
<tr>
<td>4.3 Breau, Josef, 1998-1999</td>
</tr>
<tr>
<td>4.4 Brenner, Sydney, 1994 2000</td>
</tr>
<tr>
<td>4.6 Brock, Carol, 1984-2000</td>
</tr>
</tbody>
</table>
Guide to The Jack Dunitz Papers, 1927-2009

4.7 Buck, Henk M., 1999-2000
4.8 Bürgi, Hans-Beat, 1969-2004
4.9 B: General Correspondence,

1.005 RESTRICTED: Cambridge Crystallographic Data Centre, 1988-2004 undated (4 folders)
5.1 RESTRICTED: Cambridge Crystallographic Data Centre, 1988-1995
5.2 RESTRICTED: Cambridge Crystallographic Data Centre, 1996
5.3 RESTRICTED: Cambridge Crystallographic Data Centre, 1997
5.4 RESTRICTED: Cambridge Crystallographic Data Centre, 1998-2004 undated

1.006 Correspondence: C, 1944-2007 undated (13 folders)
6.2 Cambridge, University of, 1951
6.4 Carnegie Trust, 1944 1946 1948
6.5 Castellano, Ronald K., 2002
6.8 Cornell University Press, 1993-1994
6.9 Cotton, F. Albert, 2000
6.11 Crick, Francis, 1956
6.13 C: General Correspondence,

1.007 Correspondence: D, 1946-2008 (11 folders)
7.1 Dougherty, Dennis A., 1993 1997
7.2 Delbrück, Max, 1967 1969 1990
7.3 Dervan, Peter, 1992-1999
7.4 Desiraju, Guatam, 1992-2005
7.5 Deutsche Akademie der Naturforscher Leopoldina, 1980-2008
7.6 Diederich, François, 1991-1998
7.7 Dobler, Max, 1983
7.8 Donohue, Jerry, 1956 1967-1983
7.9 Dunitz, Marguerite, 1998
7.10 Dunlop, W. R., 1946-1947 [Contains materials related to Dunitz's participation in Dunlop's "Correspondence Course on Analysis and Language."]

7.11 D: General Correspondence,

1.008 Correspondence: E, 1966-2006 (9 folders)
8.1 Egli, Martin, 1988-2006
8.2 Eijck, Boucke van, 1996 1999-2000 2002
8.3 Elguero, Jose, 1991-1998 2005
8.5 Ermer, Otto, 1966-1993
8.6 Eschenmoser, Albert, 1988-1989 2005
8.8 European Science Foundation, 1999-2003
8.9 E: General Correspondence,

1.009 Correspondence: F, 1957-1999 (6 folders)
9.1 Flack, Howard, 1998-1999
9.3 Freeman, Hans C., 1957 1988-1989
9.4 French, Alfred D., 1999

Special Collections, The Valley Library
9.6 F: General Correspondence,
1.010 Correspondence: Ga, 1989-2008 (3 folders)
10.1 Gajdusek, D. Carleton, 1994-2008 [Includes images of Caltech graduate student colleagues, including Jack Dunitz, on camping trips circa 1948. Also includes two photographs of Gajdusek at his own eightieth birthday party.]
10.2 Gatti, Carlo, 2003-2004
1.011 Correspondence: Gi - Gu, 1971-2000 (6 folders)
11.1 Gillespie, Ron, 1990-1994
11.2 Ginsburg, David, 1971-1990
11.5 Gunsteren, Wilfred van, 1995 [Publications only.]
11.6 G: General Correspondence,
1.012 Correspondence: H, 1934-2007 undated (12 folders)
12.1 Hager, Tom, 1995-1996 2006
12.4 Harvard University, 1993-1995
12.7 Herbst, Frank H., 1974-2007
12.8 Hirshfield, Fred L., 1982-1986
12.12 H: General Correspondence,
1.013 Correspondence: I - K, 1958-2008 undated (21 folders)
13.2 Inorganic Chemistry, 1991 undated
13.4 I: General Correspondence,
13.5 Jortner, Joshua, 1994
13.7 Journal of Physical Chemistry, 1989
13.9 J: General Correspondence,
13.13 Kendrew, John, 1958
13.16 Klebe, Gerhard, 1993 1996
13.17 Kosin, Daniel E., Jr., 1993-1994
13.18 Kresin, Roman, 1997
13.20 Kuhn, Hans, 1962-1963
13.21 K: General Correspondence,
1.014 Laboratory Research Assistant Applicants - Post-Doctoral and Sabbatical, (22 folders)
14.1 Laboratory Research Assistant Applicants: A,
14.2 Laboratory Research Assistant Applicants: B,

Correspondence: L, 1950-2004 (9 folders)
15.5 Lifson, Shneoir, 1999
15.6 Linden, Anthony, 2000
15.7 Lipscomb, William, 1951-1952
15.8 Lonsdale, Kathleen, 1950-1951 1998
15.9 L: General Correspondence,

Correspondence: M, 1956-2004 undated (12 folders)
16.2 MacKinnon, Roderick, 1998
16.3 Maddox, Brenda, 1999 2002
16.4 Mandel, George, 1956-1957 [Folder includes series of x-ray crystallographic photographs of Guanine and Azoguanine taken by Mandel.]
16.7 McGrayne, Sharon, 1991
16.9 Mnyukh, Yuri, 2002-2003
16.10 Molecular Physics, 1994 undated
16.11 Murray-Rust, Peter, 1975-1976 2004
16.12 M: General Correspondence,

Correspondence: N, 1954-1999 undated (6 folders)
17.2 National Institutes of Health, 1954-1955
17.4 Novotny-Bregger, Elisabeth, 1991-1994
17.5 Nyholm, Ronald S., 1957-1960
17.6 N: General Correspondence,

Correspondence: O, 1949-2002 (6 folders)
18.3 Oster, Gerald, 1949
18.4 Ovchinnikov, Yuri A., 1969
18.5 Oxford, University of, 1951-1953
18.6 O: General Correspondence,
1.019 Pauling, Linus, 1950-2001 (2 folders)
19.1 Pauling, Linus, 1950-1994
1.020 Correspondence: P - Q, 1952-2007 (11 folders)
20.1 Patterson, A. Lindo, 1955
20.4 Pepinsky, Ray, 1952 1957-1960
20.5 Petsko, Gregory, 1992
20.7 Popelier, David, 2006-2007
20.8 Prelog, Vladimir, 1957 1987 1995
20.9 P: General Correspondence,
20.11 Q: General Correspondence,
1.021 Correspondence: R, 1932-2008 undated (9 folders)
21.2 Roberts, Jack, 1995 undated
21.3 Robertson, J. Monteath, 1934-1959 [Publications only.]
21.4 Rollett, John S., 1954-1955
21.5 Royal Institution, 1955
21.6 RESTRICTED: Royal Society, 1974-2008
21.7 Rundle, R.E., 1950-1964
21.9 R: General Correspondence,
1.022 Correspondence: Sa - Sp, 1948-2005 (15 folders)
22.1 Sanders, Jeremy K. M., 1995
22.2 Sands, Donald, 1976-1991
22.5 Schmidt, Gerhard, 1965-1966
22.6 Schmidtchen, Franz P., 2003
22.8 Seebach, Dieter, 1988-2005
22.9 Seiler, Paul, 1976-2003
22.10 Shaik, Sason, 1993-1994
22.11 Shankland, Norman, 1998
22.12 Shearer, Harrison, 1957
22.13 Sim, George A., 1966
22.14 Somorjoi, Gabor, 1987 1993 2004
22.15 Spek, Anthony L., 1998-2000
1.023 Correspondence: St - Su, 1968-2004 (5 folders)
23.1 Steiner, Thomas, 1996-1997
23.2 Stent, Gunther, 1968-2004
23.3 Støllevik, Reidar, 1996
23.4 Sutherland, G. B. B. M., 1955
23.5 S: General Correspondence,
1.024 Correspondence: T - V, 1951-2006 (12 folders)
2. Biographical Materials and Photographs, 1967-2008 undated (2 boxes)

A wide range of biographical data is contained in this small series. Of particular note is a collection of autobiographical typescripts written by Dunitz from 1988-1990. The handful of photographs found in series 2 are complemented by the Caltech graduate student images located in the Gajdusek correspondence file.

2.001 Assorted Dunitz Biographical Materials, 1967-2008 undated (12 folders)
1.2 Typescripts: autobiographical remembrances by Jack Dunitz, 1988-1990 [Typescripts are titled La Primavera, Family Background, Pasadena (1948-51), Donde está la carretera para Mexico?, Back to Oxford (1951-53), Zurich and Notes on this and that.]
1.3 Magazine Article: "American Crystallographic Association to Meet in Toledo," Physics Today, June 1991 [Article contains reference to Dunitz's receipt of the Martin J. Buerger Award from the American Crystallographic Association.]
1.4 Typescript: Scientific Work of J. D. Dunitz, by Jack Dunitz [?]. March 1996
1.5 Correspondence re: Dunitz family genealogy, December 1996
1.6 Bound Volume: Arthur C. Cope Scholar Award, presented to Jack Dunitz at the 214th American Chemical Society National Meeting, September 1997 [Volume contains abstracts of 270 scientific papers authored by Dunitz.]
1.7 Typescript: Jack Dunitz. Oral history interview conducted by Istvan Hargittai, September 6, 1999
1.8 Typescript: untitled memorial address delivered at the funeral of Jack Dunitz's brother-in-law, Harold Sellyn. Address written and delivered by Sellyn's son, who is unnamed, November 2001
Box


Series 3 is comprised of reprints of scientific publications authored or co-authored by Jack Dunitz, as collected by Dunitz.

3.001 Publications by Jack Dunitz, 1947-1960 (33 folders)


1.3 Some Developments in Structural Chemistry. *Oxford Science* 2, 1 (June 1948): 24-34. [J. D. Dunitz and S. C. Wallwork]


<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Journal</th>
<th>Year</th>
<th>Volume</th>
<th>Pages</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Publications by Jack Dunitz, 1961-1966 (38 folders)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


3.4  Die Strukturen der mittleren Ringverbindungen. XII. Kristallstruktur der
test
1,1,5,5-Tetramethylcyclodecan-8-carbonsäure. Helv. Chim. Acta 50 (1967) 1565-1572. [J. D. Dunitz and
H. Eser]
3.5  Die Strukturen der mittleren Ringverbindungen. XIII. Zwei neue Konformationen des Cyclodecanringes. Helv.
3.6  Die Strukturen der mittleren Ringverbindungen. XIV. Struktur des Silbernitrat-trans-Cyclodecen-Addukts.
and J. D. Dunitz]
3.8  Structure of the K+ Complex with Nonactin, a Macrotetrolide Antibiotic Possessing Highly Specific K+
W. Simon]
[H. B. Bürgi, J. D. Dunitz and C. Züst]
3.12 Umordnung von Liganden an trigonal bipyramidalen Atomen. Angew. Chem. 80 (1968): 700-701. [J. D. Dunitz
(1968): 1514-1526. [H. B. Bürgi and J. D. Dunitz]
3.15 Least-squares Refinement of Centrosymmetrical Trial Structures in Non-centrosymmetric Space Groups. A
3.16 Molecular Conformation of Benzylidendianilines; Relation to Electronic Structure and Spectra. Chem. Comm.
3.17 Langsame Inversion am pyramidal gebundenen Stickstoff: Kristallstrukturanalyse des
[M. Dobler, J. D. Dunitz und D. M. Hawley]
J. D. Dunitz]
Dunitz und B. T. Kilbourn]
Bürgi und J. D. Dunitz]
3.25 Crystallographic Studies of Synthetic Corrinoids. I. Nickel (II)-1,8,8,13,13-pentamethyl-5-cyano-trans-corrin
Structural Similarities and Differences between A/D-seco-Corrinoid Complexes of Divalent Nickel, Palladium
J. D. Dunitz]
3.28 Crystal Structure of the Antibiotic Monensin. Similarities and Differences between Free Acid and Metal


4.6 Medium ring Compounds. XXVIII. 1,5-Diaza-6,10-cyclodecadione. *Acta Crystallogr.* B31 (1975): 1372-1377. [T. Srikrishnan and J. D. Dunitz]


4.16 Gerhard Schmidt (1919 - 1971) and the Road to Chemical Crystallography. Monographs in Modern Chem. 8 (1976): 255-269


4.30 Publications by Jack Dunitz, 1979-1982 (33 folders)


5.34 Publications by Jack Dunitz, 1983-1987 (37 folders)


6.15 Stereochimica. In Enciclopedia del Novecento, Volume VII. 1984, pp. 162-172
6.21 Internal Molecular Motion as Forerunner of a Phase Change Involving Conformational Isomerization. J. Amer. Chem. Soc. 107 (1985): 5535-5537. [Q. C. Yang, M. F. Richardson and J. D. Dunitz]
6.22 Internal Molecular Motion of Triphenylphosphine Oxide: Analysis of Atomic Displacement Parameters for Orthorhombic and Monoclinic Crystal Modifications at 100 and 150 K. J. Amer. Chem. Soc. 107 (1985): 6964-6970. [C. P. Brock, W. B. Schweizer and J. D. Dunitz]


Publications by Jack Dunitz, 1996-2004

3.008 Publications by Jack Dunitz, 1996-2004 (31 folders)


8.22 Don't get your helix in a twist. Chemistry in Britain (July 2000): 22


Leusen, W. T. M. Mooij, S. L. Price, B. Schweizer, M. U. Schmidt, B. P. van Eijck, P. Verwer and D. E. Williams


**Box**

4. Manuscripts and Lecture Materials, 1946-2006 undated (7 boxes)

4.001 Manuscripts of Articles by Jack Dunitz, 1946-1991 (30 folders) [This series contains a diverse collection of manuscripts and lecture materials, including a number of transparencies, drawings for slides and other visual aids created by Dunitz for use in presentation. Included in this series are several pieces written by Dunitz on the life and work of notable scientists, including Linus Pauling, John Monteath Robertson and Vladimir Prelog.]

1.1 Typescripts: "Verse", 1946-1952 1990 [Series of poems, some of them parodies of other works, written by Dunitz. Titles include The Research Student's Lament, Our Worlds Came in Collision, Lines Addressed to Dr. Orgel and Of Molecules and Men.]

1.2 Typescript: The Tragicall Comedie of Dr. Faustus. Or "Scientia vincit omnia." Stage play written by J. D. Dunitz and C. E. Harrold. ["vaguely adapted from the 'Faustus' play of Christopher Marlow, esq."] Composed for the Caltech Biology Biology Christmas party, 1950

1.3 Typescript, Correspondence, Referee's Report: Electronic Structure of Metal Bis-Cyclopentadienyls, by Jack Dunitz and Leslie Orgel, March 1953


1.5 Manuscript, Correspondence, Referee's Report: Stereochemistry of Cupric Compounds, 1956-1957

1.6 Typescript: Crystals, 1957

1.7 Manuscripts, Notes, Correspondence: Molecular Energetics Drafts, ca. 1958 [Series of untitled manuscripts for a proposed book.]

1.8 Manuscript: Lattices, ca. 1950s

1.9 Manuscript: Scattering of X-rays by Matter, ca. 1950s

1.10 Manuscript, Typescripts, Correspondence, Notes: The Nature of Orientational Defects in Ice, November 1962

1.11 Typescript: Untitled discussion of the determination of molecular structure by X-ray diffraction methods, ca. 1962

1.12 Typescripts, Correspondence, Referee's Report: Configuration, Conformation and Chirality, 1965

1.13 Typescript, Notes, Correspondence: Silver Fluoride - Preparation from Silver Carbonate, 1965-1967


1.15 Typescript, Notes, Correspondence, Visual Aids: Molecular Basis of Alkali Cation Transport by Macrocyclic Antibiotics of the Valinomycin Group, by Jack Dunitz and A. D. McLachlan, April 1969

1.16 Manuscript, Correspondence: Pentagon (in Space) with All Angles and All Distances Equal Must Be Planar, 1971

1.17 Typescript, Notes: Non-empirical SCF calculations on hydrogenlike molecules: the effect of nuclear charge on binding energy and bond length, by Jack Dunitz and T. K. Ha, 1972

1.18 Typescript: The Early History of Silver Cyanate and Fulminate, by Doyle Britton and Jack Dunitz, ca. 1970s

1.19 Typescript, Correspondence, Referees' Reports, Background Materials: Electron Density Distribution in the Organic Superconductor (TMTSF)2AsF6: Fact and Fancy, December 1983
1.20 Typescript, Notes: Measurement of the State of Ionicity of the Atoms in Lithium Fluoroberyllate, a Conventionally Ionic Crystal, ca. 1985
1.21 Typescript: Science Students, letter to the editor of The Economist by Jack Dunitz, September 15, 1987
1.22 Typescripts: Edward Wesley Hughes (1904-1987), ca. 1988
1.24 Typescript: Conformational Polymorphism of Ferrocene, by Carolyn Brock, Daniel Selski, Emily Maverick and Jack Dunitz, ca. 1989
1.26 Manuscript, Typescript: Structural Variability of Aliphatic Nitro Groups, Yasushi Kai and Jack Dunitz, ca. 1980s
1.27 Typescript: John Monteath Robertson (1900-1989), ca. 1990
1.28 Typescript: The Cambridge Structural Database as a New Scientific Tool, February 7, 1991
1.29 Typescript: Linus Pauling - Born 1901, Still Going Strong, May 1991
1.30 Typescript, Notes, Correspondence: Racemates and Conglomerates: Wallach's Rule, by Carolyn P. Brock, W. Bernd Schweizer and Jack D. Dunitz, ca. 1991
2.1 Typescript, Correspondence: Linus Pauling (1901-1994); Some Personal Recollections, September 1994
2.2 Typescript, Correspondence: A New Look at Proton Transfer Dynamics Along the Hydrogen Bonds in Amides and Peptides, December 1994
2.3 Typescript, Correspondence: Linus Pauling, 1901-1994, ca. 1994
2.5 Typescript: LINUS CARL PAULING, 28 February 1901 - 19 August 1994, ca. 1994
2.6 Typescript, Correspondence, Background Materials: A New Look at Proton Transfer Dynamics Along the Hydrogen Bonds in Amides and Peptides, 1994-1995
2.7 Typescript, Correspondence, Background Materials: Right and Left in Chiral Crystals, February 1995
2.8 Correspondence, Background Materials: Disappearing Polymorphs, ca. 1995
2.9 Typescript, Correspondence, Background Materials: Letter to the Editor of Chemical and Engineering News. [re: changes in the publication policy enforced by the Journal of the American Chemical Society], June 13, 1996 [Published in the International Union of Crystallography Newsletter, 4, 3 (1996): 4.]
2.10 Typescript, Correspondence: Potassium Channels: the Dubious Role of K+..pi Interactions, by Robin Taylor and Jack Dunitz, March 1996
2.12 Typescript, Notes, Correspondence, Figures: Chemical Reaction Paths. IX. Visualization of Four-Dimensional Stereoisomerization Paths for Ph4X Molecules, ca. 1997
2.14 Typescript: Dorothy Crowfoot Hodgkin: an Introduction to her Work and Personality, ca. 1997
2.15 Typescript: Recollections of Pre-Prebiotic Leslie Orgel, ca. 1997
2.16 Typescript: Kenneth N. Trueblood (1920-1998), ca. 1998
2.17 Typescript: Encounters with Bragg, ca. 1990s
2.18 Typescript: Right and Left at the Bürgenstock Conference 1973, ca. 1990s
2.19 Typescript: Ewald - Sommerfeld - von Laue anecdote, ca. 1990s
2.20 Assorted untitled Dunitz typescripts and research materials re: the life and work of Linus Pauling, ca. 1990s
2.21 Typescripts, Correspondence: Vladimir Prelog, 23 July 1906 - 7 January 1998, by Duilio Arigoni, Jack Dunitz and Albert Eschenmoser, 2000
2.22 Typescripts, Galley Proofs, Correspondence, Background Materials: Pauling's left-handed alpha-helix, June 2001
2.23 Typescript: Sir John Meurig Thomas at 70, 2002
2.24 Typescript: Light is a Messenger: The life and science of William Lawrence Bragg, by Dr. Graeme K Hunter. Oxford University Press, 2004
2.25 Typescript, Correspondence, Referee's Report: *Exercises in Prognostication: Crystal Structures and Protein Folding*, 2004

2.26 Typescript, Correspondence: *Are Crystal Structure [sic] Predictable?*, ca. 2004

2.27 Typescript: *1905 Anno Mirabilis: Albert Einstein's Influence on Modern Chemistry*, 2005


4.003 Lectures by Jack Dunitz, 1953-1976 (14 folders)
3.1 Manuscript: Untitled discussion of the application of quantum mechanics to chemistry, with special focus on the Molecular Orbital method, ca. 1953

3.2 Manuscript: *Cyclopentadienyl Talk*, ca. 1956

3.3 Typescript: *Distortions from Cubic Symmetry*, 1957

3.4 Typescript, Background Materials: Untitled discussion of cyclobutadiene, 1959

3.5 Typescripts: Untitled lecture on contemporary developments in crystallography, Inaugural Lecture, Swiss Federal Institute of Technology, Zurich, Switzerland, ca. 1959 [English and German-language typescripts.]

3.6 Manuscripts: X-ray analysis lectures, ca. 1950s [Extensive series of lecture manuscripts discussing the specifics of x-ray analysis.]

3.7 Manuscript: *Structural Investigations of Some Antibiotic Substances*, ca. 1960s

3.8 Notebook: *X-Ray Diffraction Lectures - Disorder*, ca. 1960s


3.10 Typescript, Notes, Background Materials: *A Simple Selection Rule for Electrocyclic Reactions*, ca. 1970


3.12 Manuscript, Notes: Untitled lecture on complexes of alkali and alkaline earth complexes with organic ligands, ca. 1972

3.13 Typescript: *Organische Chemie*, Eschenmoser lecture, Basel, Switzerland, March 26, 1976


4.004 Lectures by Jack Dunitz, 1977-2006 undated (31 folders)
4.1 Typescript, Notes: *Von Kristallstrukturen zu chemischen Reacttionswegen*. Keynote Speech, Annual General Meeting of the German Chemical Society, Munich, Germany, September 14, 1977

4.2 Manuscript: Untitled lecture on non-bonded interactions, ca. 1970s

4.3 Typescript, Background Materials: *The Cyclohexane Ring*, ca. 1970s

4.4 Manuscript: Untitled lecture on the need to reconsider the initial classification of primary processes related to 3-coordinated and 5-coordinated species. Presented at the "Idea Centenary", ca. 1970s

4.5 Manuscript Notes re: untitled lecture on irregular coordination, ca. 1970s


4.7 Typescript, Notes: *Crystal Structure and Chemical Reactivity*, ca. 1970s

4.8 Typescript: Untitled lecture on the physical and chemical properties of medium-sized alicyclic rings, ca. 1970s

4.9 Typescript: *Unverrichtete Dinge*, ["Empty handed"] talk delivered at a celebration held at ETH Zürich, July 7, 1989

4.10 Typescript, Correspondence, Background Materials: *After-dinner Talk at the Symposium in Memory of David Ginsburg, Haifa*, September 19, 1989

4.11 Typescript: untitled German-language remarks delivered at a meeting of the Swiss Technion Society, December 5, 1990

4.12 Lecture Notes, Photograph, Program: Eighteenth Course on Static, Kinematic and Dynamic Aspects of Crystal and Molecular Structure, International School of Crystallography. Erice, Italy. Hans-Beat Buergi and Jack D. Dunitz, directors, May 30 - June 9, 1991 [Includes a group photo of all who attended the conference in Erice. Dunitz is seated in the front row, sixth from left.]

4.14 Typescript: Scientists and their Social Responsibility, manuscript prepared for a meeting of Fundacion BBV, Bilbao, Spain, ca. September 1992

4.15 Typescript: untitled lecture on Dorothy Hodgkin and Linus Pauling. Published in Dorothy Hodgkin and Linus Pauling: A Tribute, talks presented at the Montreal meeting of the American Crystallographic Association, July 25, 1995


4.18 Typescript: Thoughts on European Culture and Unity, meeting of Fundacion BBV, Bilbao, Spain, October 4-5, 1998

4.19 Typescripts: Scientific Research - Panacea or Pandora's Box [alternatively titled by Dunitz as "Spain Talk."], ca. 1990s [Folder also contains a thematically related partial typescript titled "BBV Lecture."]

4.20 Manuscript: Untitled discussion of mathematical puzzles and Linus Pauling, ca. 1990s


4.22 Typescript: untitled remarks delivered at a symposium held in celebration of Dunitz's eightieth birthday, 2003

4.23 Abstract, Program: Are Crystal Structures Predictable? Conference on Non-Covalent Interactions in Chemistry and Biology, University of Cambridge, September 16, 2004

4.24 Typescript: CCDC Dinner. Remarks made at the fortieth anniversary celebration of the Cambridge Crystallographic Data Centre, September 23, 2005

4.25 Typescript, Background Materials: Edgar Heilbronner, 1921-2006, 2006

4.26 Typescript: Sydney Brenner, ca. 2000s

4.27 Typescript: The Golden Age at Caltech, ca. 2000s

4.28 Manuscript: Notes on Hydrogen Bonding, undated

4.29 Manuscript: Untitled introduction to x-ray crystallographic analysis, undated

4.30 Manuscript: Untitled discussion of the relationship between crystal chemistry and the electronic structure of ions, undated

4.31 Assorted non-Dunitz quotations for use in presentations and articles, undated

4.005 Lecture Transparencies, ca. 2000 (5 folders)

5.1 Lecture Transparencies re: crystal structure, ca. 2000

5.2 Lecture Transparencies re: general and organic chemistry, ca. 2000 [Text primarily in German.]

5.3 Lecture Transparencies re: history of crystallography, ca. 2000

5.4 Lecture Transparencies re: phase transitions and polymorphism, ca. 2000

5.5 Lecture Transparencies re: symmetry, ca. 2000

4.006 Assorted Transparencies, Figures and Visual Aids, undated (1 folder)

6.1 Assorted Transparencies, Figures and Visual Aids, undated

4.007 Drawings for Slides, undated (1 folder)

7.1 Drawings for Slides, undated [Drawings created for eventual conversion into lecture transparencies.]

Box

5. Research Notes and Notebooks, 1941-1989 (5 boxes)
Series 5 consists of research notes, arranged alphabetically by subject, and research notebooks, arranged chronologically. The diversity of topics represented in this series are indicative of the many scientific interests maintained by Dunitz over the course of his career.


1. Notes, Background Materials re: "Couper's Compound", 1966 1970 [Includes x-ray crystallographic photographs labeled "Couper's Compound."]
1.2 Notes re: crystal structure determinations, ca. 1950s [Includes examinations of adamantane, cyclohexane, cyclohexene and cyclooctadiene among others.]
1.3 Notes re: electromagnetism, ca. 1950s
1.4 Notes re: hemoglobin, 1953-1954
1.5 Notes: "Method of Finding Maximum of Fourier Peak by Least Squares (Shoemaker)", ca. 1950s [Notes on a technique devised by David Shoemaker.]
1.6 Notes: "Molecular Statics", 1949-1950
1.7 Notes re: nitrogen, ca. 1950s
1.8 Notes re: research reports, 1946-1949
1.9 Notes re: ribonucleic acid, 1953
1.10 Notes re: statistical thermodynamics, 1946 [Notes primarily from a lecture delivered by W. C. Orr.]
1.11 Notes re: sulphur, ca. 1950s
1.12 Notes: "Waves", ca. 1950s

5.002 Research Notebooks, 1941-1946 (6 folders)
2.1 Research Notebook: "Mathematics: Calculus, Infinite Series", 1941-1942
2.2 Research Notebook: "Mathematics: 3 Dimensional Coordinate Geometry, Partial Differentiation", 1944
2.4 Research Notebook: "Acetylene Dicarboxylic Acid Dihydrate, Diacetylene Dicarboxylic Acid Dihydrate, Research Book I", 1944-1946
2.5 Research Notebook: "Physics; Triple Bond Calculations", 1944-1946
2.6 Research Notebook: "Acetylene Dicarboxylic Acid Dihydrate, Diacetylene Dicarboxylic Acid Dihydrate, Research Book II", 1945

5.003 Research Notebooks, 1948-1951 (6 folders)
3.3 Untitled Research Notebook, 1949-1950 [Notebook is primarily devoted to a detailed exploration of the structures of chloromycetin, bromamphenicol and aureomycin. Also includes notes on terramycin hydrochloride and isoplasmicide.]
3.4 Research Notebook: "Stercobilin Hydrochloride", 1949-1951 [Also contains notes titled "Dimerisation Product of Acenaphthylene."]
3.5 Untitled Research Notebook, 1950 [Contains notes on quantum mechanics, the movement of electrons and the structure of the hydrogen molecule. Also contains notes on bond orbital hybridization, optics and the "4 electron problem."]
3.6 Untitled Research Notebook, ca. 1951 [Contains notes on Pauling's "Nature of the Chemical Bond" as well as a comparison of the valence bond and molecular orbital theories of chemical structure as utilized in colleague's publications.]

5.004 Research Notebooks, 1952-1955 (6 folders)
4.1 Untitled Research Notebook, 1952 [First interior page is titled "Elementary Thermodynamics Notes."]
4.2 Untitled Research Notebook, 1952-1953 [Contains analyses of various crystal structures and notes on colleagues' structural chemistry publications.]
4.3 Untitled Research Notebook, 1953-1954 [Contains notes on nucleic acids and proteins, as well as colleagues' structural chemistry research.]
4.4 Research Notebook: "Misc Notes", 1954-1955 [Contains notes on nucleic acids, hemoglobin, proteins and model building. Also contains notes on angular momentum and the movement of electrons.]
4.5 Research Notebook: "NIH Exp 54-55", 1954-1955 [First interior page is titled "Experiments in Molecular Complex Formation Among Purines, Pyrimidines, etc." Also includes notes on nucleic acids and experiments on Na2S2O4.]
4.6 Research Notebook: "Misc 55", 1955 [Contains notes on light scattering, molecular orbitals and assorted crystal structure determinations. Also contains work on ferrocene, sodium hydrosulfite and chromium dibenzene.]

5.1 Untitled Research Notebook, 1956 [Contains Dunitz's daily log of work that he has conducted as well as notes on colleagues' publications on a variety of topics.]
<table>
<thead>
<tr>
<th>Box</th>
<th>6. Subject Files, 1927-2008 (19 boxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The subject files held in series 6 consist of notes and subject-specific publications collected and organized by Dunitz over time.</td>
</tr>
</tbody>
</table>

| 6.001 Subject Files: A, 1927-2002 (4 folders) | |
| 6.002 Subject Files: B, 1948-2004 (5 folders) | |
| 6.003 Chirality [1 of 2], 1964-2004 (1 folder) | |
| 6.004 Chirality [2 of 2], 1975-2001 (1 folder) | |
| 6.005 Subject Files: Co - Cr, 1940-2000 (2 folders) | |
| 6.006 Subject Files: E, 1969-2003 (3 folders) | |
| 6.007 Ferrocene [1 of 2], 1952-2005 (2 folders) | |
| 6.008 Ferrocene [2 of 2], 1953-1991 (1 folder) | |
| 6.009 Subject Files: Fo - G, 1949-1983 (2 folders) | |

| 5.3 Untitled Research Notebook, 1970-1974 1982 1985 [Contains notes and calculations on a number of topics related to crystal structure.] |
| 5.5 Research Notebook: "Pentagons", June 1972 |
| 5.6 Research Notebook: "Literature", 1973-1978 |
12.1 Notes, Publications re: ice, 1958-1965
12.3 Publications re: methadone, 1973-1974
12.4 Notes, Publications re: middle rings, 1956-1969
6.013 Molecular Geometry, 1944-1983 (1 folder)
6.014 Subject Files: N - Pa, 1956-2005 (4 folders)
14.1 Publications re: neutron diffraction, 1972
14.2 Notes, Publications re: nitroso compounds, 1956-1982
14.4 Publications re: packing in chemical structures, 1962-2005
6.015 Phase Transitions, 1957-2001 (1 folder)
15.1 Notes, Publications re: phase transitions, 1957-2001
6.016 Subject Files: Pol - R, 1940-2007 (3 folders)
16.1 Notes, Publications re: polymorphism, 1940-2007
16.2 Notes, Publications re: potassium ion channels, 1981-2001
16.3 Publications re: reactivity of organic solids, 1990
6.017 Subject Files: Sp - St, 1942-1998 (2 folders)
17.1 Notes, Publications re: space groups, 1942-1998
17.2 Notes, Publications re: structure correlation, 1965-1998
6.018 Subject Files: St - Sy, 1935-2006 (2 folders)
18.1 Notes, Publications re: structure - miscellaneous, 1935-2006
6.019 Subject Files: T - X, 1937-2002 (7 folders)
19.1 Notes, Publications re: tetrahedra, 1956-1976
19.2 Notes, Publications re: tobacco mosaic virus, 1952-1955
19.3 Publications re: travel, 1943-1948
19.4 Notes, Publications re: vitamin B12, 1959-1982
19.5 Publications re: vitamin C, 1953-1977
19.7 Notes, Publications re: x-ray analysis, 1957-2002