

RICHARD C. SCHOONMAKER PAPERS

INVENTORY

Series I. Committees, 1991-95, n.d.

Box 1

American Chemical Society (ACS) Awards Committee, 1995, n.d.
American Chemical Society (ACS) Canvassing Committee, 1991-95, n.d.

Series II. Conferences and Seminars, 1988-92, n.d.

Box 1 (cont.)

Gordon Research Conference
Dynamics of Gas Surface Interactions, 1989
High Temperature Chemistry, 1990
High Temperature Chemistry Poster, 1990
High Temperature Chemistry, 1992,
High Temperature Chemistry Poster, 1992
Seminars
Army War College National Security Seminar, 1988-90, n.d.

Series III. Correspondence, 1972-95 (Restricted)

Box 2

Correspondence, Student Recommendations, 1975-1993, (10f)

Box 3

Correspondence, Internal Affairs, 1974-95, (10f)

Box 4

Correspondence, General, 1972-87, (11f)

Box 5

Correspondence, General, 1988-93, (6f)

Series IV. Grants, 1962-92

Box 6

U.S. Army Research Office (Durham)/ Air Force Office of Scientific Research,
1962-66
Petroleum Research Fund, 1971-92 (5f)

Series IV. Grants, 1962-92 (cont.)

Box 6 (cont.)

National Science Foundation, 1962-66, 1979, 1982-87 (3f)

Series V. Instructional Materials and Sabbaticals, 1966-67, 1980-81, 1987-88, 1992-93

Box 7

Courses

Chemistry 101, Laboratory Questionnaire, 1992

Organic Chemistry 101, Course Evaluations, 1992

Chemistry 102, Laboratory Evaluations, 1992

Chemistry 310, Course questionnaires, 1992

Chemistry 151, Chemistry and the Environment Course Questionnaires, 1992

Chemistry 102, Laboratory Staff Student Evaluations, 1993

Sabbatical Leave

Oxford, NSF Fellowship, 1966-67

Berkley, NSF Fellowship, 1980-81

Correspondence, 1987-88

Fritz Haber Institut., Max Planck Fellow, 1987-88

Series VI. Reference Materials, Drawings, and Writings (others), 1934-87 [span] , n.d.

Box 8

Surface diffusion and desorption: M. Mutz: drawings, calculations, n.d.

CSI, Cs Poster, Paper Figs. etc., n.d.

CSI inked drawings, n.d.

Inked drawings Apparatus and Rbl for *Journal of Applied Physics.*, n.d.

Mol. Beam Scattering, 1979, n.d. (3f)

Transparencies, CSI, 1985, n.d.

Scattering, Old Material, 1934, 1955-59, n.d.

Computer Modelling – desorption and surface Diffusion Studies, 1974, 1977, 1984, 1987

Series VII. Writings by Richard C. Schoonmaker, 1958-91 [span], n.d.

Box 9

Writings, 1958-61, 1965, 1967, 1968, 1972, 1974-76, 1982, 1985, 1991, n.d. (32f)

See inventory of writings included in this collection.

INVENTORY OF WRITINGS

NOTE: This is an inventory of the writings contained in the Richard C. Schoonmaker Papers, Series VII.

Articles:

- "Gaseous Species in the Vaporization of Sodium Hydroxide," R. Schoonmaker and R. Porter, *J. Chem. Phys.*, 28, 454 (1958).
- "Gaseous Species in the Vaporization of Potassium Hydroxide," R. Porter and R. Schoonmaker, *J. Phys. Chem.*, 62, 234 (1958).
- "Gaseous Species in the NaOH-KOH System," R. Porter and R. Schoonmaker, *J. Phys. Chem.*, 62, 486 (1958).
- "Mass Spectrometric Study of the Vaporization of NaF, LiF, and NaF-LiF Mixtures," R. Porter and R. Schoonmaker, *J. Chem. Phys.*, 29, 1070 (1958).
- "Mass Spectrum of Gaseous Cupric Nitrate," R. Porter, R. Schoonmaker, and C. Addison, *Proc. Chem. Soc.*, 11, Jan. 1959.
- "A Mass Spectrometric Study of the Vaporization of Ferrous Bromide," R. Porter and R. Schoonmaker, *J. Phys. Chem.*, 61, 626 (1959).
- "Heats of Dimerization of Alkali Fluoride Molecules," R. Schoonmaker and R. Porter, *J. Chem. Phys.*, 30, 283 (1959).
- "Mass Spectrometric and Thermodynamic Study of the Vaporization of Transition Metal (II) Halides," R. Schoonmaker, A. Friedman, and R. Porter, *J. Chem. Phys.*, 31, 1586 (1959).
- "Mass Spectrometric Study of High Temperature Reactions of H₂O(g) and HCl(g) with Na₂O and Li₂O," R. Schoonmaker and R. Porter, *J. Phys. Chem.*, 6-4, 457 (1960)
- "Long Range Attractive Potentials from Molecular Beam Studies on the Systems K, N₂(g) and KCl, N₂(g)," R.C. Schoonmaker, *J. Phys. Chem.*, 65, 892 (1961).
- "Gallium Nitride," Richard C. Schoonmaker and Claudia E. Burton, *Inorganic Syntheses*, Vol VII, p. 16, McGraw Hill Book Co. (1963).

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- “The Vaporization of Gallium Phosphide,” P.K. Lee and Richard C. Schoonmaker, Condensation and Evaporation of Solids, Gordon and Breach Pub. Co., New York, N.Y., 1965, p. 379.
- “Vaporization Catalysis. The Decomposition of Gallium Nitride,” Richard C. Schoonmaker, Albert Buhl, and James Lemley, J. Phys. Chem., 69, 3455 (1965).
- “The Vaporization of Zinc Phosphide,” Richard C. Schoonmaker, A.R. Venkitaraman, and P.K. Lee, J. Phys. Chem., 71, 2767 (1967).
- “The Vaporization of Cadmium Phosphide,” Richard C. Schoonmaker and Kenneth Rubinson, J. Phys. Chem., 71, 3345 (1967).
- “The Invisible Man: Josiah Willard Gibbs,” The Malahat Review, University of Victoria, Victoria, British Columbia, Canada, 111 (1968).
- “The Vaporization of Zinc Arsenide,” Richard C. Schoonmaker and Keith Lemmerrnan, J. Chem and Eng. Data, 17, 139 (1972).
- “Mechanism of Condensation I. Direct Determination of Coefficients for Condensation of Molecular Beams of Sodium Chloride on (100) Oriented Single Crystals of NaCl,” R.C. Schoonmaker and V. Lo, J. Chem. Phys., 58, 727 (1973).
- “Mechanism of Condensation II. Condensation of Molecular Beams of Sodium Chloride on Clean and Contaminated Surfaces of Oriented Single Crystals of NaCl,” R.C. Schoonmaker and L.C. Tu, J. Chem. Phys., 60, 4650 (1974).
- “Low Energy Auger and Loss Spectra of Magnesium and its Oxide,” A.P. Janssen, R.C. Schoonmaker, A. Chambers, and M. Prutton, Surf. Sci., 45, 45 (1974).
- “Flame Temperature,” N.C. Craig, T.S. Carlton, and R.C. Schoonmaker, J. Chem. Ed., 51, 54 (1974).
- “Interfacial Auger Transitions in Oxidized Sodium and Magnesium,” A.P. Janssen, R.C. Schoonmaker, J.A.D. Matthew, and A. Chambers, Solid State Communications, 14, 1263 (1974).
- “A Comparative Study of Single Crystal Magnesium Oxide and Oxidized Magnesium by Auger Electron Spectroscopy,” A.P. Janssen, R.C. Schoonmaker, and A. Chambers, Surf. Sci., 47, 41 (1975).
- “A Study of Epitaxial Growth of Magnesium on Magnesium Oxide (001) Using Reflection Diffraction, LEED, and Auger Spectroscopy,” A.P. Janssen, R.C. Schoonmaker, and A. Chambers, Surf. Sci., 49, 143 (1975).

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- “Desorption and Diffusion of Sodium Chloride Molecules Adsorbed on a Sodium Chloride (100) Crystal Surface,” Paul O’Connor and Richard Schoonmaker, *J. Phys. Chem.*, 80, 390 (1976).
- “An Auger and Reflective Electron Diffraction Investigation of Oxygen and Hydrogen Adsorption on Strontium Surfaces,” A.P. Janssen and R.C. Schoonmaker, *Surf. Sci.*, 55, 109 (1976).
- “Structure Sensitivity in the Iron Single-Crystal Catalysed Synthesis of Ammonia,” N.D. Spencer, R.C. Schoonmaker, and G.A. Somorjai, *Nature*, 294, 643 (1981).
- “Iron Single Crystals as Ammonia Synthesis Catalysts: Effect of Surface Structure on Catalyst Activity,” N.D. Spencer, R.C. Schoonmaker, and G.A. Somorjai, *J. Catalysis*, 74, 129 (1982).
- “Dynamics of the Gas-surface Interaction and the Mechanism of Condensation of RbI Molecules Incident on NaCl (100) Surfaces,” S. Baker and R.C. Schoonmaker, *J. Appl. Phys.*, 58, 2091 (1985).
- “Bridging the "Material Gap" Between Single Crystal Studies and Real Catalysis,” R. Schloegl, R.C. Schoonmaker, M. Muhler, and G. Ertl, *Catalysis Letters*, 1, 237 (1988).
- “Molecular- and Atomic-Beam Scattering from Surfaces. Dynamics of Gas-Surface Interactions and Mechanisms of Condensation of Cesium Iodide Molecules and Cesium Atoms Incident on Sodium Chloride (c, 100),” T. Brown, K. Pranata, E. Heyman, and R. Schoonmaker, *Chemistry of Materials*, 3, 298 (1991).
- “Microstructure of the Activated Industrial Ammonia Synthesis Catalyst,” W. Mahdi, J. Schuetze, R. Wineberg, R. Schoonmaker, R. Schloegl, and G. Ertl, *Catalysis Letters*, 11, 19-32 (1991).

Catalysis, NH₃ Synthesis, Berkley, 1980-81

Molecular Beam Velocity Selector, P. Kusch and R. Schoonmaker, n.d.