

CURRICULUM VITAE

Robert C. Dunbar

Birthdate: June 26, 1943, Boston, Massachusetts

Education: B.A. degree in Chemistry, Harvard University, 1965
Ph.D. degree in Chemical Physics, Stanford University, 1970

Thesis: "Ion Cyclotron Resonance Studies of Ion-Molecule Interactions", under the direction of Professor John D. Baldeschwieler

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Associate Professor of Chemistry, Case Western Reserve University, 1975-1978

Professor of Chemistry, Case Western Reserve University, 1978 - present

Honors and Awards: Sloan Fellow, 1973-1975

Sigma Xi Research Award, 1977

John Simon Guggenheim Memorial Fellow, 1978-79

Society Memberships: American Chemical Society
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American Physical Society
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Publication List

Robert C. Dunbar

1. L. R. Anders, J. L. Beauchamp, R. C. Dunbar, and J. D. Baldeschwieler, "Ion Cyclotron Double Resonance," *J. Chem. Phys.*, 45, 1062 (1966).
2. R. C. Dunbar, "Energy Dependence of Ion-Molecule Reactions," *J. Chem. Phys.*, 47, 5445 (1967).
3. R. C. Dunbar, "Ion-Molecule Chemistry of Diborane by Ion Cyclotron Resonance," *J. Am. Chem. Soc.*, 90, 5676 (1968).
4. J. L. Beauchamp and R. C. Dunbar, "Identification of $C_2H_5O^+$ Structural Isomers by Ion Cyclotron Resonance," *J. Am. Chem. Soc.*, 92, 1477 (1970).
5. R. C. Dunbar, "Energy Dependence of Methanol Proton Transfer Reaction Rate," *J. Chem. Phys.*, 52, 2780 (1970).
6. R. C. Dunbar, "Transient Ion Cyclotron Resonance Method for Studying Ion-Molecule Collision and Charge-Transfer Rates: N_2^+ and CH_4^+ ," *J. Chem. Phys.*, 54, 711 (1971).
7. R. C. Dunbar, "Positive and Negative Ions and Ion-Molecule Reactions of Several Boron Hydrides Studied by Ion Cyclotron Resonance," *J. Am. Chem. Soc.*, 93, 4167 (1971).
8. R. C. Dunbar, "Photodissociation of the CH_3Cl^+ and N_2O^+ Cations," *J. Am. Chem. Soc.*, 93, 4354 (1971).
9. R. T. McIver and R. C. Dunbar, "Pulsed Ion Cyclotron Double Resonance for the Study of Ion-Molecule Reactions," *Int. J. Mass Spectrom. Ion Phys.*, 7, 471 (1971).
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12. R. C. Dunbar, "Ion-Molecule Reactions of Diborane and Oxygen-Containing Compounds," *J. Phys. Chem.*, 76, 2467 (1972).
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15. P. P. Dymerski and R. C. Dunbar, "An ICR Study of Non-Reactive Collision Rate Constants," *J. Chem. Phys.*, 57, 4049 (1972).
16. R. C. Dunbar, J. Shen and G. A. Olah, "Substituent Effects in Gas-Phase Nitration and Acetylation of Aromatics," *J. Am. Chem. Soc.*, 94, 6862 (1972).
17. R. C. Dunbar, "The Study of Gas-Phase Ions by Ion Cyclotron Resonance," in "Chemical Reactivity and Reaction Paths," G. Klopman, Ed., Wiley- Interscience. (1974).

18. J. M. Kramer and R. C. Dunbar, "The Photodissociation of Gaseous Olefinic Cations," *J. Chem. Phys.*, 59, 3092 (1973).
19. R. C. Dunbar and E. Fu, "Photodissociation Spectroscopy of Gaseous $C_7H_8^+$ Cations," *J. Am. Chem. Soc.*, 95, 2716 (1973).
20. R. C. Dunbar, J. Shen, E. Melby and G. A. Olah, "Gas-Phase Methylenation of Benzene and Substituted Benzenes by $C_2H_5O^+$ Ion: A Novel Electrophilic Aromatic Substitution," *J. Am. Chem. Soc.*, 95, 7200 (1973).
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22. R. C. Dunbar, "Gas-Phase Photodissociation of Alkylbenzene Cations," *J. Am. Chem. Soc.*, 95, 6191 (1973).
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