

NAMED RULES IN CHEMISTRY

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Kurt Alder



10 July 1902 - 20 June 1958

German, b. Königshütte, Upper Silesia, now Chorzow, Poland

Nobel Prize Chemistry 1950

Alder Rule

Alder, K.; Günzl, W. *Chem. Ber.* **1960**, 93, 809

Biographical References:

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Richard McLean Badger

4 May 1896 – 26 November 1974

American, b. Elgin, Illinois, USA

Badger rules, Badger equation, Badger constants

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Badger, R.M., *J. Chem. Phys.* **1935**, 3, 710

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Sir Jack Edward Baldwin

8 August 1938 -

British, b. Bow Bells, U.K.

Baldwin's Rules

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Sidney William Benson

26 September 1918 – 30 December 2011

American, b. New York, New York, USA

Benson's Additivity Rule

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Konrad Julius Bredt

29 March 1855 - 21 September 1937

German, b. Aachen, Germany

Bredt's Rule

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Biographical References:

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Robert Sidney Cahn

9 June 1899 – 15 September 1981

British, b. ?

Cahn-Ingold-Prelog Rules

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Thomas Carnelley

22 October 1854 - 27 August 1890

British, b. Manchester, England

Carnelley's melting point-molecular symmetry rule

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William Wallace Cleland

6 January 1930 -

American, b. Baltimore, Maryland, USA

Cleland rules

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Biographical references:

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New Providence, New Jersey, 1998

Gerhard Ludwig Closs

1 May 1928 - 24 May 1992

German - American, b. Wuppertal, Germany

Kaptein-Closs Rules

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Kaptein, R.; Oosterhoff, L.J., *Chem. Phys. Lett.* **1969**, 4, 214

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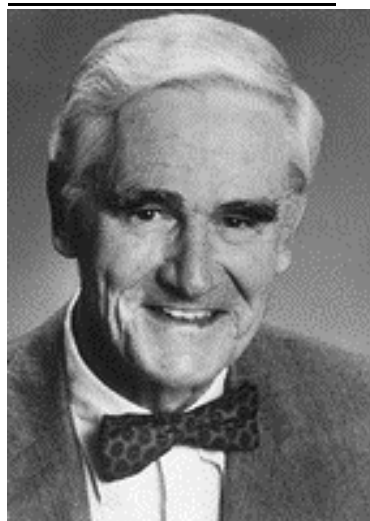
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Donald J. Cram



22 April 1919 – 17 June 2001

American, b. Chester, Vermont, USA

Nobel Prize Chemistry 1987

Cram's Rule

Cram, D.J.; Elhafez, F.A.A., *J. Am. Chem. Soc.* **1952**, 74, 5828

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Mostafa Amr El-Sayed

8 May 1933 -

Egyptian-American, b. Zifta, Egypt

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Kasimir Fajans



27 May 1887 - 18 May 1975

Polish, b. Warsaw, Poland

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Louis Frederick Fieser

7 April 1899 - 25 July 1977

American, b. Columbus, Ohio, USA

Biographical References:

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Mary Peters Fieser

27 May 1909 - 22 March 1997

American, b. Atchison, Kansas, USA

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George Gamow

4 March 1904 - 20 August 1968

Ukrainian, b. Odessa, Ukraine

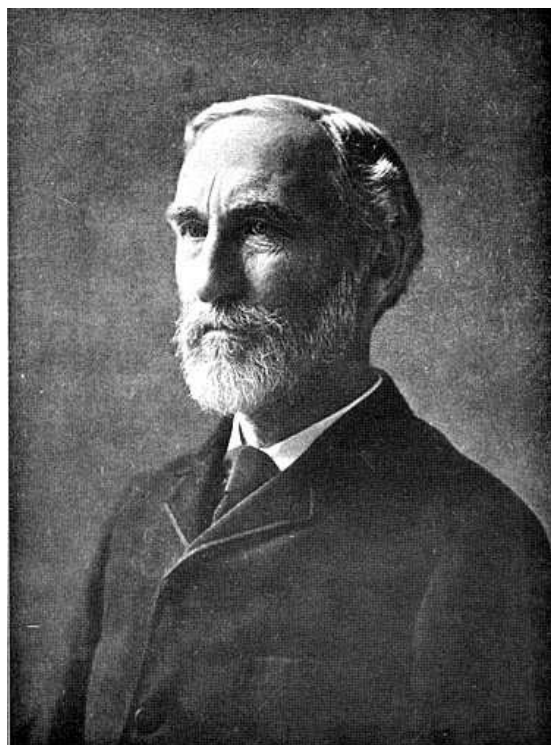
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Josiah Willard Gibbs



11 February 1839 - 28 April 1903

American, b. New Haven, Connecticut, USA

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Gibbs Phase Rule

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Roald Hoffmann



18 July 1937 -

Polish-American, b. Zloczow, Poland, now Zolochiv, Ukraine

Nobel Prize Chemistry 1981

Woodward-Hoffmann Rules

Woodward, R.B.; Hoffmann, R., *J. Am. Chem. Soc.* **1965**, 87, 395

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August Wilhelm von Hofmann



8 April 1818 - 2 May 1892

German, b. Giessen, Germany

Hofmann's Rule

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Erich Armand Arthur Joseph Hückel

9 August 1896 - 16 February 1980

German, b. Berlin-Charlottenburg, Germany

Hückel's Rules

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Claude Silbert Hudson

26 January 1881 - 27 December 1952

American, b. Atlanta, Georgia, USA

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Friedrich Hermann Hund

4 February 1896 – 31 March 1997

German, b. Karlsruhe, Germany

Hund's Rules

Hund, F., *Z. Physik* **1925**, 33, 345

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Sir Christopher Kelk Ingold

28 October 1893 - 8 December 1970

British, b. Forest Gate, London, England

Cahn-Ingold-Prelog Rules

see Robert Sidney Cahn

Biographical References:

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R. Kaptein

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see Gerhard Ludwig Closs

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Biographical References:

Michael Kasha

6 December 1920 -
American, b. Elizabeth, New Jersey, USA

Kasha's Rule

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Otto Laporte

23 July 1902 - 28 March 1971
German, b. Mainz, Germany

Laporte rule for dipole radiation

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Pogg. **1974**, 7B(L-M), 2725 - 6

Vladimir Vasilevich Markovnikov (also Markownikoff)

22 December 1838 - 11 February 1904

Russian, b. Knyaginino, Nizhegorodskaya (now Gorki region), Russia

Markovnikov's Rule

Markownikoff, V.V., *Ann. Chem.* **1870**, 153, 228

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Earl Leonard Muetterties

23 June 1927 -

American, b. Elgin, Illinois, USA

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Eugen Friedrich Wilhelm Müller

6 June 1905 - 7 July 1976

German, b. Merken, near Düren, Germany

Müller-Müller-Rodloff biradical rule

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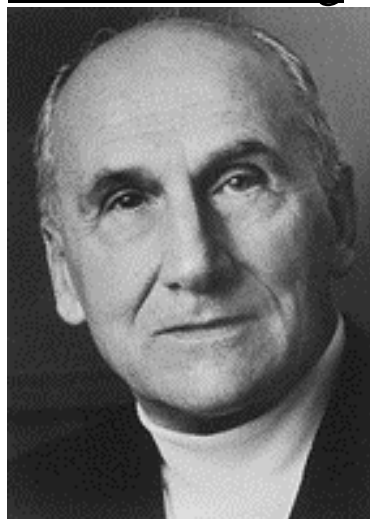
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Vladimir Prelog



23 July 1906 - 7 January 1998

Yugoslavian-Swiss, b. Sarajevo, Bosnia and Hercegovina

Nobel Prize Chemistry 1975

Cahn-Ingold-Prelog Rules

see Robert Sidney Cahn

Prelog's Rule

Prelog, V. *Helv. Chim. Acta* **1953**, 36, 308

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Otto Redlich

4 November 1896 - 1978

Austrian, b. Vienna, Austria

Teller-Redlich product rule

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Martin André Rosanoff

28 December 1874 - 30 July 1951

Ukrainian-American, b. Nicolajeff, Ukraine

Rosanoff-Fischer projection rules

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Aleksandr Mikhailovich Saytzeff (also Zaitsev, Saytzev)

20 June 1841 - 2 September 1910

Russian, b. Kazan, Russia

Saytzeff's Rule

Saytzeff, A., *Ann. Chem.* **1875**, 179, 296

Biographical References:

Lewis, D.E., *J. Chem. Educ.* **1994**, 71, 93

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James Nelson Shoolery

25 June 1925 -

American, b. Worland, Wyoming, USA

Shoolery NMR Rule

Shoolery, J.N., *J. Chem. Phys.* **1953**, 21, 1899

Dailey, B.P.; Shoolery, J.N., *J. Am. Chem. Soc.* **1955**, 77, 3977

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Edward Teller



15 January 1908 - 09 September 2003

Hungarian-American, b. Budapest, Hungary

Gamow-Teller Selection Rule

see George Gamow

Biographical References:

Daintith, J.; Mitchell, S.; Tootill, E.; Gjersten, D., *Biographical Encyclopedia of Scientists*, Institute of Physics Publishing: Bristol, UK, 1994

Sergey Ivanovich Vavilov

24 March 1891 - 25 January 1951

Russian, b. Moscow, Russia

Kasha-Vavilov Rule

see Michael Kasha

Biographical References:

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Paul Walden (Pavel Ivanovich)



P. Walden

26 July 1863 - 22 January 1957
Latvian-German, b. Cesis, Latvia

Walden's Rule; Walden's inversion

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Eugene Paul Wigner



17 November 1902 - 1 January 1995
Hungarian-American, b. Budapest, Hungary

Nobel Prize Physics 1963

Wigner's Rules

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Seitz, F.; Vogt, E.; Weinberg, A.M. *Biog. Memoirs Fellows Roy. Soc.* **2000**, 46, 577

Robert Burns Woodward



10 April 1917 - 8 July 1979
American b. Boston, Massachusetts, USA

Nobel Prize Chemistry 1965

Woodward-Hoffmann Rules

See Roald Hoffmann

Fieser-Woodward Rules

see Louis Frederick Fieser and Mary Fieser

Biographical References:

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