

**Walter M. Fletcher**  
(Cambridge, 1868)

→ **Hill plot (1910)**  
Discovery of heat production in muscle  
**Physiology & Medicine**  
**Nobel 1922**

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**Ralph H. Fowler**  
(Cambridge, 1915)

**Sir Alan L. Hodgkin**  
Discovery of ionic mechanisms  
involved in excitation and  
inhibition in nerve cells  
**Physiology & Medicine**  
**Nobel 1963**

**Herbert S. Gasser**  
Discovery of differentiated  
functions of nerve fibres  
**Physiology &  
Medicine Prize 1944**

**Dirac  $h$**   
**Fermi-Dirac statistics**  
**(1926)**  
contributions to atomic theory  
quantum mechanics of electron  
**(1926 - 7)**  
**Dirac bra-ket notation (1958)**  
**Physics Nobel 1933**

**Guggenheim method**  
**(1926)**

**Hartree unit of energy**  
**Hartree equation**  
**(1928 - 1929)**  
**Hartree-Fock-Roothaan**  
**method (1951)**

**Aaron Klug**  
development of crystall-  
ographic electron micro-  
scopy; structure elucidation  
of nucleic acid-protein  
complexes  
**Chemistry Nobel 1982**

**Subramanyan**  
**Chandrasekhar**  
structure and evolution  
of stars  
**Physics Nobel**  
**1983**

**Lennard-Jones potential**  
**(1924)**; concept of molecular  
orbital as a linear combination of  
atomic orbitals (LCAO)  
approximation **(1929)**  
Concept of crystal lattice energy  
**(1925)**

**Ralph W. Gerard**  
(Chicago, 1921; Cambridge)

**Gilbert N. Ling**  
(Chicago, 1948)

**Christopher Miller**  
(Pennsylvania, 1974)

**Roderick MacKinnon**  
(Tufts, 1982 MD; Brandeis)  
Discovery and structure of ion  
channels in cell membranes **(1998)**  
**Chemistry Nobel 2003**

**Sir Fred Hoyle**  
(Cambridge, 1939)  
Coining of cosmological  
term "Big Bang"

**Max L.H. Delbrueck**  
Discovery of replication  
mechanism and genetic  
structure of viruses  
**Physiology & Medicine**  
**Nobel 1969**

**Paul C. Lauterbur**  
(Pittsburgh, 1962)  
Development of 2-D MRI  
images by introducing gradients in  
magnetic fields  
**Medicine Nobel 2003**

**John A. Pople**  
development of  
computational methods  
in quantum chemistry  
(*ab initio* calculations),  
**Pariser-Parr-Pople**  
**method (1953)**  
**Chemistry Nobel 1998**

**Charles A. Coulson**  
(Cambridge, 1936)

**William E. Moffitt**  
(Oxford, 1948)

**Berry pseudorotation**  
**(1960)**  
**Carl J. Ballhausen**  
Ligand field theory **(1979)**