



## LINUS PAULING

Reading: "Bulletin of Atomic Scientists," Dec., 1960; Jan., 1961.  
"Great American Scientists," by the editors of Fortune.

NEXT WEEK: Sigmund Freud, most quoted and misquoted man in history.

LINUS PAULING, a tall, thin man with a shock of gray, unruly hair, discovered a deep, closely guarded secret of nature, the secret of how atoms bind themselves together in molecules.

We have all read that everything is made of atoms associated in molecules. For some reason these atoms, like those that make up the chair in which you sit, do not scatter to the four winds but stick together so firmly they can't be dislodged even by taking an ax to the chair.

All you can do with an ax is break up the chair. The atoms that are bound together in the wood cannot be separated so crudely.

Pauling won the 1954 Nobel Prize in chemistry for his discovery of some of the principles that determine the cohesiveness of atoms.

The idea of a chemical bond holding atoms together in molecules was developed 100 years ago. Pauling removed some of the mystery and developed the theory to make it more useful to chemists.

These discoveries led him to important new understanding of the atomic framework of both inorganic and organic things—things such as metals and alloys, drugs and even the living tissue of plants and animals.

Pauling's book, "The Nature of the Chemical Bond," is one of the classics of modern science.

Pauling was born in Portland,

Ore., Feb. 28, 1901. He first showed an interest in science by collecting insects when he was 11. A year later he was collecting rocks and minerals. When he was 13 he became a chemist and has been a chemist ever since.

From then until now he has enthusiastically explored the world of atom and molecule and navigated the uncharted seas of sub-microscopic matter.

He went to California Institute of Technology in 1927 as an assistant professor, became a full professor when only 30, and head of the division of chemistry and chemical engineering when only 36.

Pauling's interests are as wide as the world is wide. He has done original research in mathematics, physics, geology, biology and medicine as well as in chemistry. His work on rocket propellants and substitutes for blood in transfusions from 1940 to 1946 earned him the Presidential Medal for Merit.

His interest in politics has made him a dissenter from many popular and "accepted" opinions. He is a man President Kennedy might well have had in mind when he said Americans recognize "the value of daring and dissent" and regard "healthy controversy as the hallmark of healthy change."