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Solid Rocket Propellants: Science and Technology Challenges

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The History of Rocket Systems Involved

1.1 History of Rocket

Fire is the origin of weapon development. The use of fire pots, containing gunpowder, is reported as far back as 1000 B.C. Archytas, a Greek philosopher, is credited with the invention of the rocket in 360 B.C. He filled water in a hollowed-out log and placed a pigeon inside. The pigeon moved under its own power through strategically placed holes. In Alexandria demonstrated the principle of the gyroscope, which a globe mounted on two wheels through tangentially placed axles. (Archytas' *Philosophiae Naturalis Principia* is a collection of principles of Natural Philosophy) in which he defined reaction principles.

The Chinese were the leaders in the development of rocketry. By 200 B.C., they had discovered black-powder, while the Greeks had discovered the temperature reaction. They forgot to add charcoal. They added sulfur, then, they had made Black-powder.

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