*The Systeme International Metric*

*The International System of Units*

Quantitative measurement is the cornerstone of modern science, but it has not always been so. The application of quantitative measurements to chemistry, for example, does not predate AD 1500. Quantitative measurement was developed for other purposes, as technology, and was only then adopted for scientific use. The system of weights and measures were developed on an ad hoc basis in different parts of the world. The most fundamental quantities measured were mass or weight, length or distance, and time. Systems of units for measuring these were developed from the very beginning of recorded history. Measurement of temperature was added in the sixteenth century, and measurement of electric current in the eighteenth century. More recently the amount of substance and luminous intensity have been added in the International System of Units, or SI.

The International System of Units or Systeme Internationale (SI) is an improved metric system adopted by the Eleventh General Conference of Weights and Measures in 1960. It is the universal measuring system used in all areas of science throughout the world. The entire SI system of measurement is constructed from seven base units, each of which represents a single physical quantity as shown in the table below.

energy

Base Units of the International System

Quantity

Name of Unit

Unit Symbol

length

metre

m

mass

kilogram

kg

time

second

s

temperature

kelvin

K

joule

J

power

watt

W