?

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(SI).

2018.

1.

10%

4% [1].

2.

(measurable quanti-

ty),

[2].

(system of quantities).

(base quantity)

[3],

(International System of Quantities, ISQ)

a

283

: 19.05.2016.

: 17.06.2016.

. ISQ
ISO/IEC 80000 [4].

3.

(measurement unit).

(Stevin)

(John Wilkins),

(„mètre“)

a je

86.400

(4°C).

, (Antoine Lavoisier) , .
 . , .
 , (BIPM), .
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 () . , [5].
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 , 1799. -
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 " " " " -
 " " " " 1881.
 , , " " (,
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 .
 Friedrich Gauss) (1832) (Karl , -
 [6].
 . (CGPM), 1889. ,
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 (Charles de Coulomb) (- - , S).
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 (Giovani Giorgi) 1901.
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 , 1946. ,
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 1875.
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 1968.
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 1954.
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 1971. () SI.
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 (1956)
 (1900).
 1979.
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 1960.
 (Le Système international d'unités, SI).
 1983.
 SI
 1.
 86.
 1967.
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 SI

ts).
A
[7].
4.
(1870),
[9].
1889.

(action)

 $\text{kg m}^2 \text{s}^{-1}.$

2 -

 SI

(),
A s.

$$(\text{s}^{-2} \text{ m}^2 \text{ kg K}^{-1} = \text{J K}^{-1}).$$
 $\text{mol}^{-1},$ 540×10^{12}

(

$$).$$

10-

- (superconductor/insulator/-normal metal/insulator/ superconductor, SINIS, turbine) [12].
- 5.
- [14].
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SUMMARY

INTERNATIONAL SYSTEM OF UNITS, RETURN TO THE BASIC PRINCIPLES?

The purpose of this paper is to describe the measurement and metrology from the measurement units point of view. Metrology is one of the first areas in which a broad international cooperation is established. There are a number of organizations today, whose ultimate goal is the establishment and maintenance of measuring unity in the world. The basis for this is an internationally accepted system of measuring units (SI). The paper contains a brief history of the development of the current and the conception of a new system of units, whose adoption is expected in 2018.

Key words: *International System of Units, the basic unit of measurement, physical constant, the definition of basic units of measurement*