Scientific divisions INRIM

Administrative council decision 20-11-2018

The Divisions plan and implement the Institute scientific and technical activities. Each division contributes within its competence to the three Institute missions:

• Developing and fostering scientific research in metrology. This activity includes the science of measurement as such, the research on materials, innovative standards of measurement units, the innovative usage and adaptation of measurement in challenging areas of grand national and international interest.

• Acting in the capacity of Italian National Metrology Institute (L. 273/1991); this includes maintaining, improving and disseminating the national standards of the assigned SI units, and representing Italy in the international metrology bodies.

• Fostering, releasing and transferring the available knowledge to the economy and to society at large; this includes applied research, training and knowledge transfer, attention to companies, advice to the public administration, support to the economy, and standardization.

Advanced materials metrology and life sciences

The Division develops metrological science and advanced materials with attention to research and applications in life sciences.

Themes include, but are not limited to, healthcare connected to diagnostic and therapeutic procedures, food quality and safety, biological and chemical measurements, responsive and functional materials, ultra sound and acoustics.

Applied metrology and engineering

The Division develops metrological science and technologies with attention to engineering and industrial needs.

The Division is in charge of the realization and dissemination of mechanical and thermodynamic quantities, as well as the dissemination of electrical quantities.

Themes include, but are not limited to, sustainable mobility, environmental monitoring and climate, energy management, and the development of metrology tools in the increasingly digitalized world.

Quantum metrology and nano technologies

The Division develops metrological science and nano technologies with attention to quantum applications.

The Division is in charge of the realization and dissemination of time and frequency units, of photometric and radiometric quantities, and the realization of the electrical units.

Themes include, but are not limited to, the potential of metrology for atomic physics, photonics, quantum electronics, quantum devices, and quantum measurements, and vice versa