

# Stamps International

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Royal Institute of Chemistry  
1877-1977

## Bye-Bye, IPK!

The International Prototype Kilogram, after 130 years of dutiful service, is finally retiring. The IPK, a golf ball-sized cylinder made of a special platinum-iridium alloy (90:10), was introduced in 1889 at the first General Conference on Weights and Measures (CGPM) near Paris to define the unit of mass using an artifact fabricated with the utmost care and precision available at the time. New units were subsequently adopted for other physical quantities such as electric current (the ampere) and temperature (the kelvin), and the increasing need for a more cohesive set of units of measurement led to the implementation of the International System of Units (SI) in 1960.

In the ensuing decades, progressively more sophisticated definitions were adopted for certain SI base units but, remarkably, the kilogram remained until recently the only one still defined by a physical object rather than a fundamental property that could be independently measured in different laboratories. Things changed last November when the 26th CGPM voted unanimously to update the definitions of some base units and start defining the kilogram using a fixed value of Planck's constant ( $h$ ), which is now known with a high degree of certainty. On 20 May 2019, World Metrology Day, an updated and more stable SI will become effective, and the venerable IPK will literally rest in peace.

There are at least 30 or 40 postage stamps dedicated to the metric system, including several issued in

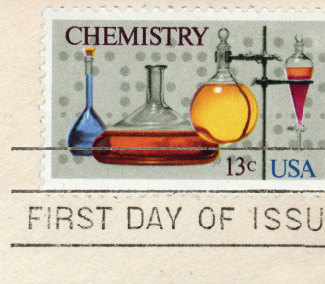
1975 to mark the centennial of the Meter Convention and others that feature SI base or derived units. Surprisingly, as far as I know, there are only three stamps that depict the IPK. The ones from Indonesia and Bulgaria, illustrated above, also show the International Prototype Meter, a rigid bar with a characteristic Xshaped cross-section made of the same alloy as Le Grand K and used to define the meter until 1960. In turn, the third stamp displays one of Mexico's original replicas of the IPK and was issued in 2015 to commemorate the 125th anniversary of the country's membership in the CGPM. So, this coming May 20th, let's all bid farewell to the revered prototype with a heartfelt "Au revoir, IPK!"

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## Mail a Stamp to Dan!

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