

# World Metrology Day

## Measurements for Health

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SIM President  
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# What is World Metrology Day?

- World Metrology Day falls on the anniversary of the signing of the Metre Convention (20 May 1875)
- The Metre Convention was initially signed by representatives from 17 nations
- Today, 63 nations have signed the Treaty, and 39 NMIs have become Associate Members

World Metrology Day (2021) - SIM

The Quality System Task Force celebrates  
World Metrology Day - 2021



World Metrology Day  
**Measurement for Health**

20 May 2021  
[www.worldmetrologyday.org](http://www.worldmetrologyday.org)



# Measurement Services supporting Public Health – SIM NMIs (1/2)

SIM member NMIs have been called upon to support national efforts to combat the COVID-19 pandemic. Examples include :



NRC (Canada) – testing and evaluation of PPE



INTI (Argentina) – procedures and proper use of non-contact IR thermometers for public health officials



CENAM (Mexico) – test methods for the identification of SARS-Cov-2 virus



IBMETRO (Bolivia) – low flow measurements for ventilators

# Measurement Services supporting Public Health – SIM NMIs (2/2)

SIM member NMIs have been called upon to support national efforts to combat the COVID-19 pandemic. Examples include:



INMETRO (Brazil) – supporting the development of a pulmonary ventilator



INEN (Ecuador) – Infrared thermometers for clinical diagnosis



LCM (Costa Rica) – 3-D printing masks, ventilator fans, ethanol content in sanitizers



NIST (USA) – efficacy and safety of hand sanitizers; characterization of filtration efficiency of cloth masks

# SIM Projects supporting Measurements for Health - addressing the impacts of COVID-19



UV Metrology:  
Evaluation of UVC  
Technologies for UV  
Radiation  
Disinfection



Development of  
*basic metrology  
infrastructure* to  
support medical  
testing equipment  
(ventilators)

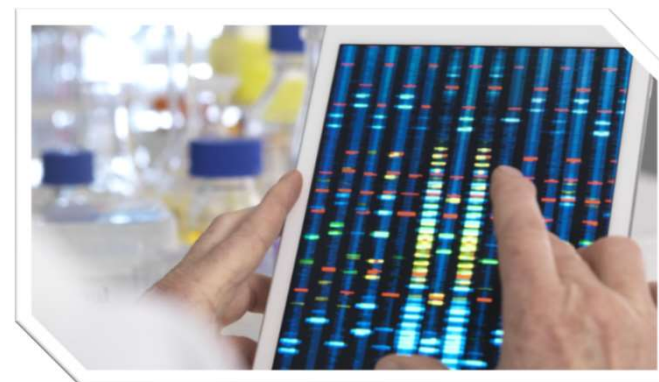


Infrared  
Thermometry:  
noncontact, thermal  
infrared  
measurement  
devices



# SIM Pilot Study – SARS-Cov-2 DNA Copy Number Quantification

- Pilot study, led by CENAM, will focus on two measurand values:
  - “Low” copy number concentration ( $10^1 - 10^2$ ) copies/ $\mu$ L
  - “High” copy number concentration ( $10^2 - 10^4$ ) copies/ $\mu$ L
- Results will help validate services provided to PCR testing laboratories
- Registered participants: INMETRO, INTI, LATU, INM, ISP, NIST, and CENAM



SIM MWG – 8 (Chemistry and Biology)



# Support from SIM Partners – Inter-American Development Bank

*Metrology for Digital Transformation to Support Health services in LAC and Address Measurement Challenges Associated with Pandemics such as COVID-19*



Achieve new digital metrology services with a focus on the health area adapted to the conditions of the region and its countries and deployed to address emerging technologies as a result of the COVID-19 crisis

Project Organizers working with SIM's TC and MWGs to develop and organize activities – proposals expected by 1 July 2021

Thank you!  
¡Gracias!  
Obrigado!  
Dank u!  
Merci!

Claire Saundry

SIM President

World Metrology Day 2021

