

METROLOGY INFRASTRUCTURE IN SWEDEN

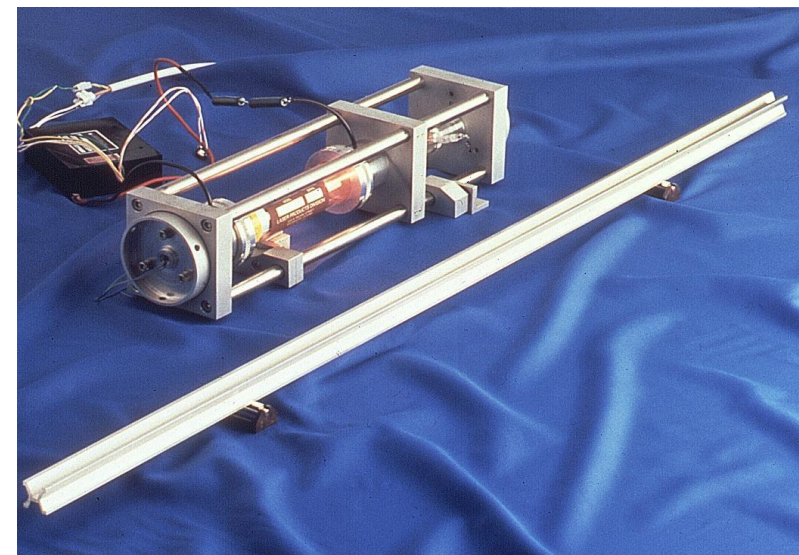
Jan Johansson

Research Institutes of Sweden

Safety & Transport
Measurement Science & Technology



General Assembly 2019



Metrology infrastructure in Sweden



Government Offices of Sweden

**Ministry of
Enterprise and
Innovation**



Government Offices of Sweden

Ministry of the Environment and Energy

Swedish Radiation Safety Authority (SSM)

*Designated Institute responsible for ionizing
radiation*

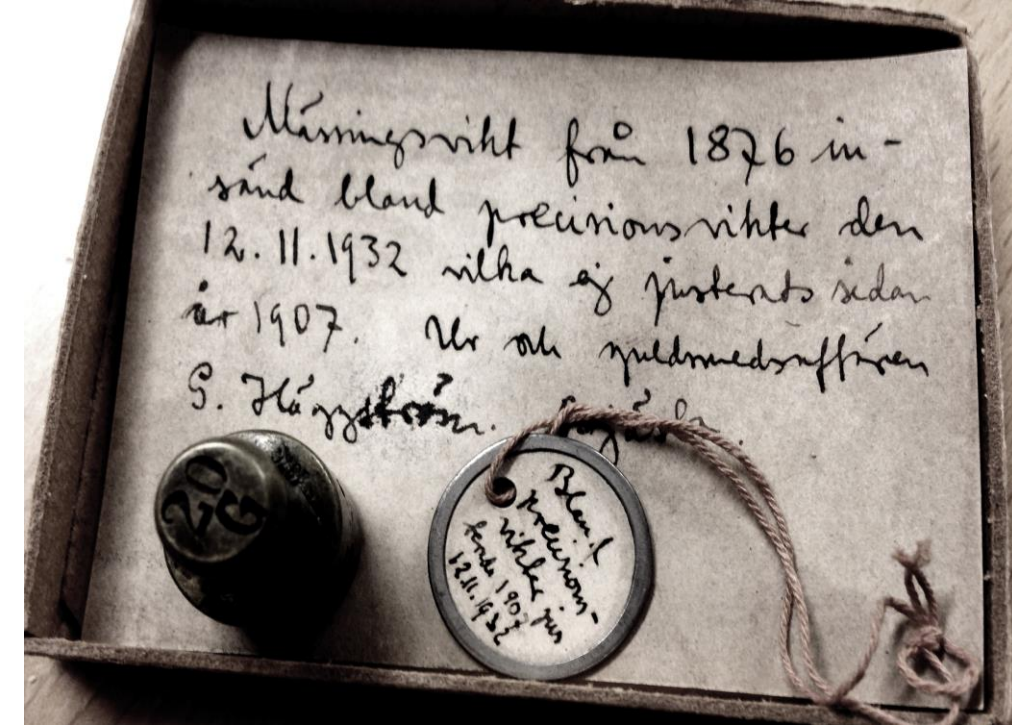


Research Institutes
of Sweden

National Metrology Institute

RISE - History in short

- 1665 Weights & measures ordinance
- 1831 Swedish royal control and testing
- 1875 Jernkontoret testing institute
- 1920 **Statens Provningsanstalt (SP)** was founded in Stockholm
- 1993 **SP Swedish National Testing and Research Institute**
 - SP is converted from authority to company owned by the Ministry of Enterprise.
- 2007 **SP Technical Research Institute of Sweden**
 - A holding company called RISE is formed, owning SP and other technical institutes
- 2017 **RISE Research Institutes of Sweden**



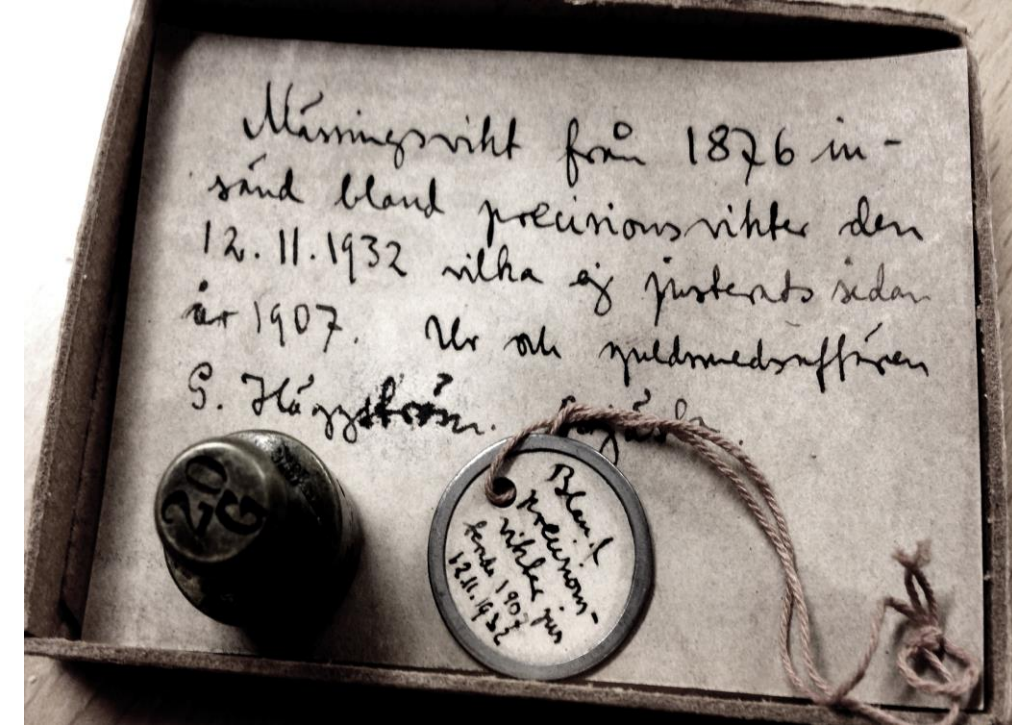
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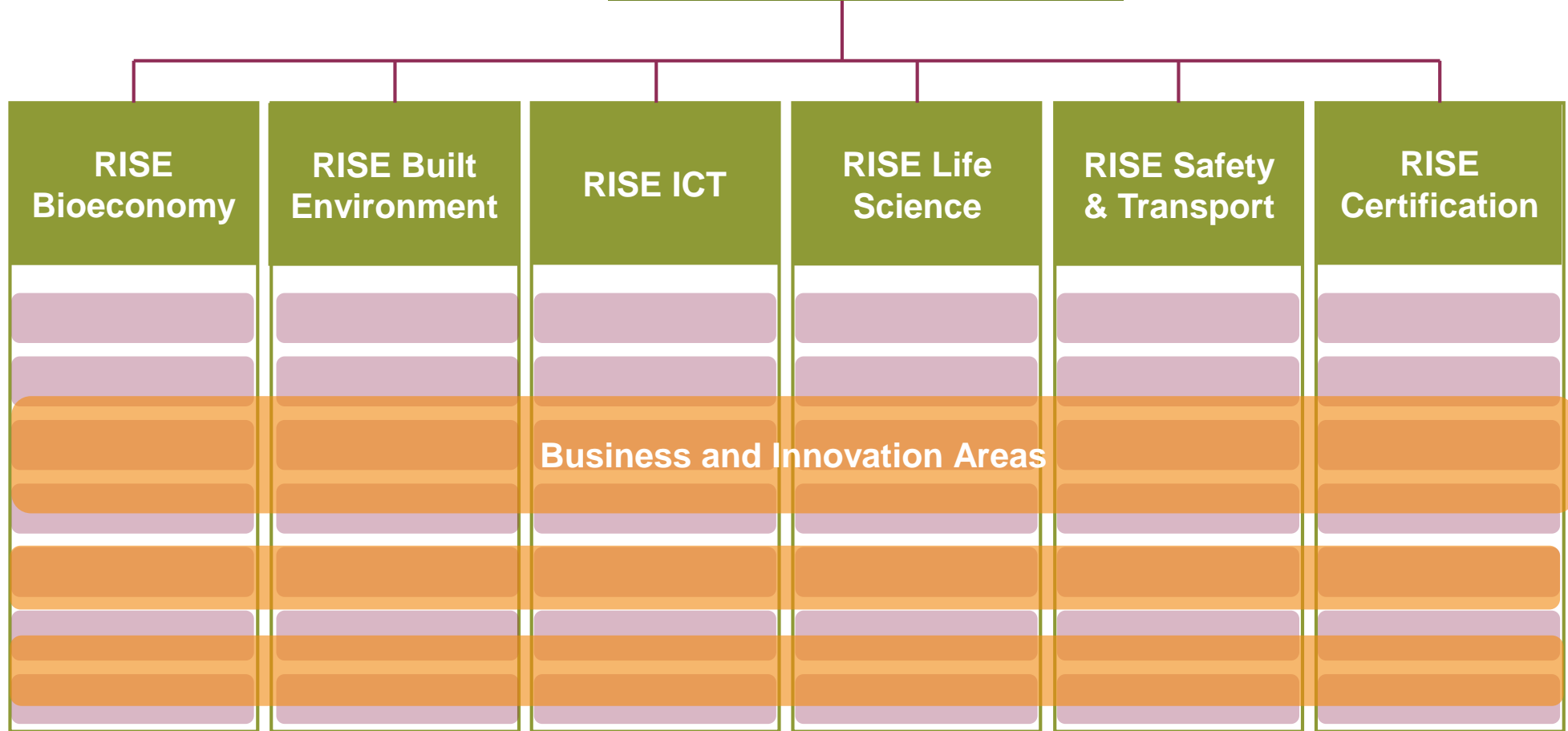
SP staff: 300
NMI staff: 80

SP staff: 1600 other
NMI staff: 100

RISE staff: 2800
NMI staff: 130

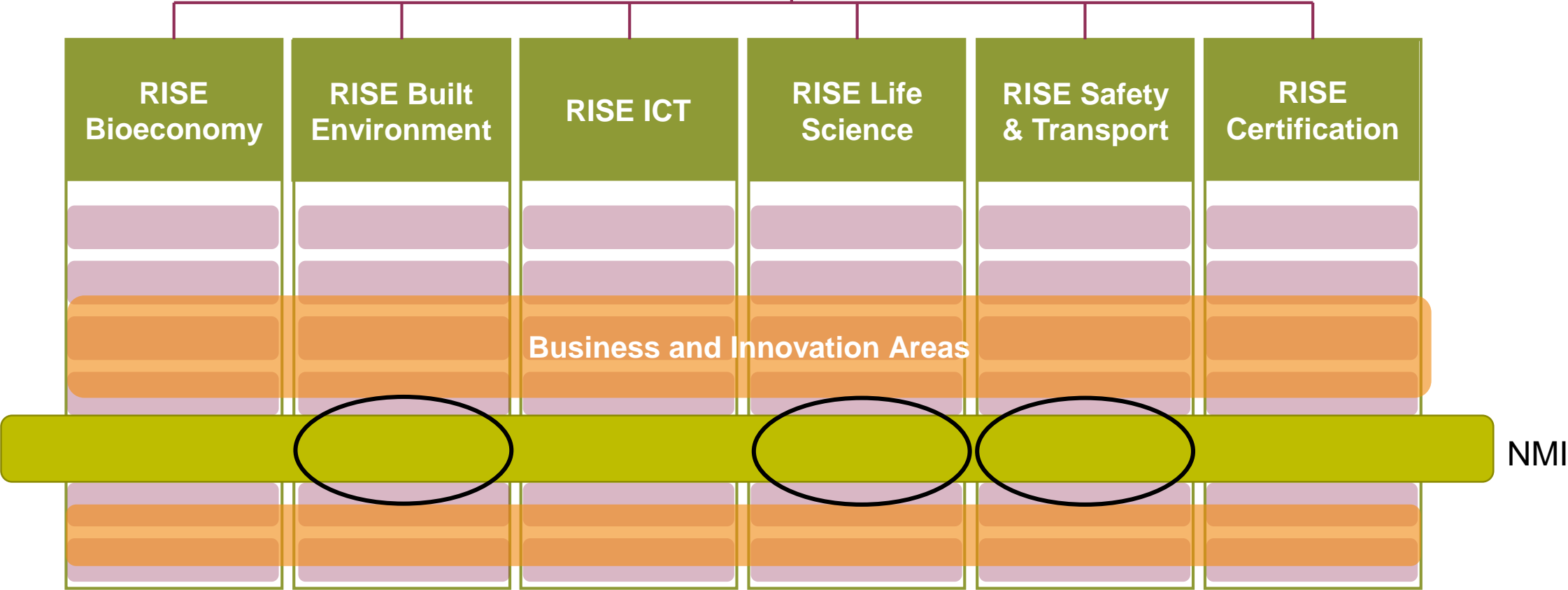


RISE Research Institutes of Sweden

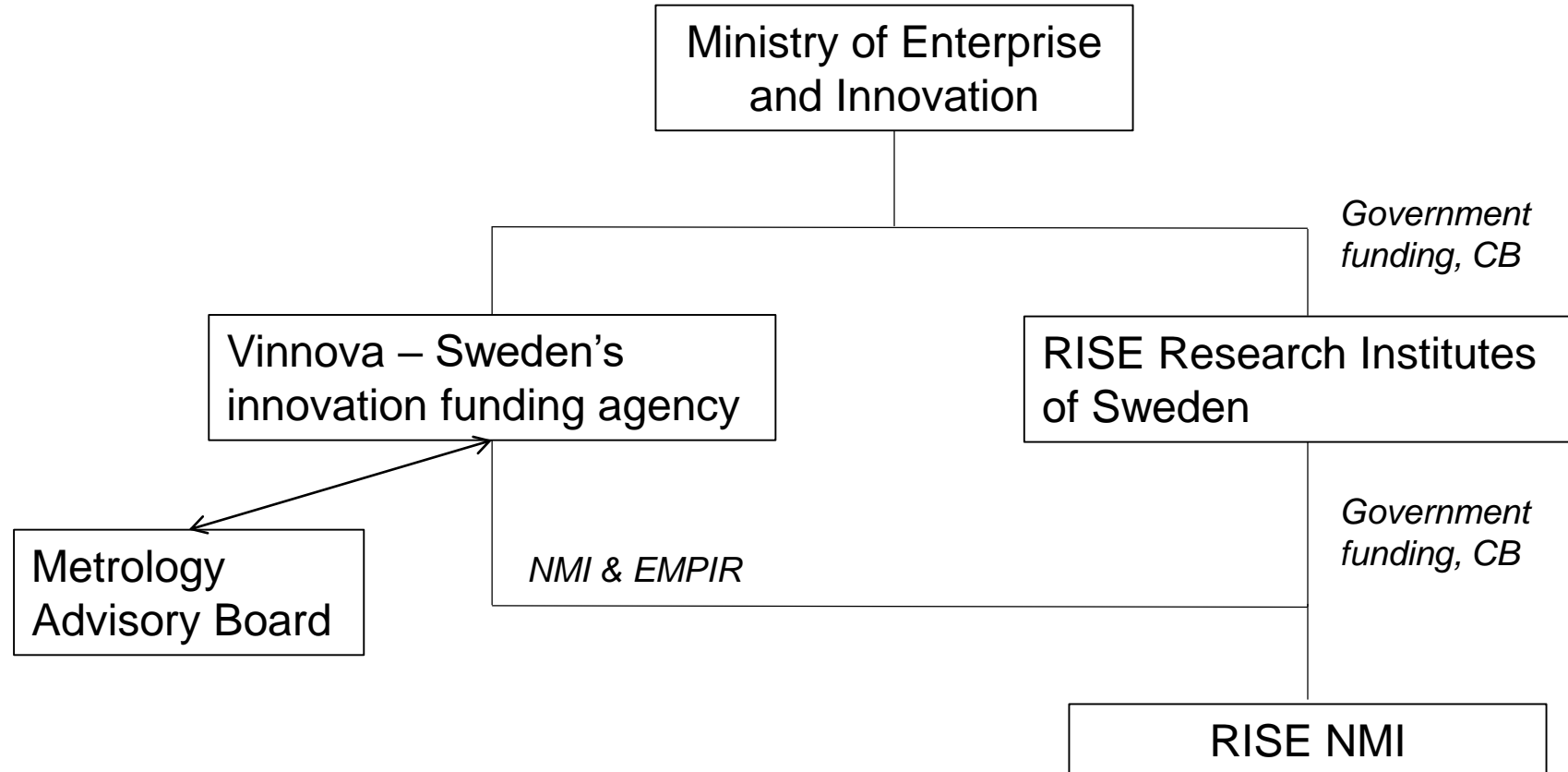


RISE Research Institutes of Sweden

Divisions



RISE as Swedish National Metrology Institute



Sweden has one Designated Institute – Swedish Radiation Safety Authority (SSM) - responsible for ionizing radiation

RISE as Swedish National Metrology Institute (cont.)

- Positive trend regarding NMI core funding
 - Increased internal support and collaboration within RISE
 - Governmental NMI core funding, from Vinnova, has increased over the last 5 years
- NMI has large increase in “other” public funding e.g. H2020
- The NMI has about 1600 customers per year in services such as calibration and training courses
- Government will announce research in measurement technique and metrology as a focus area



Mass



Length



Volume



Pressure



Force



Acceleration



Sound pressure



Time / Frequency



Electricity



Photometry / Radiometry



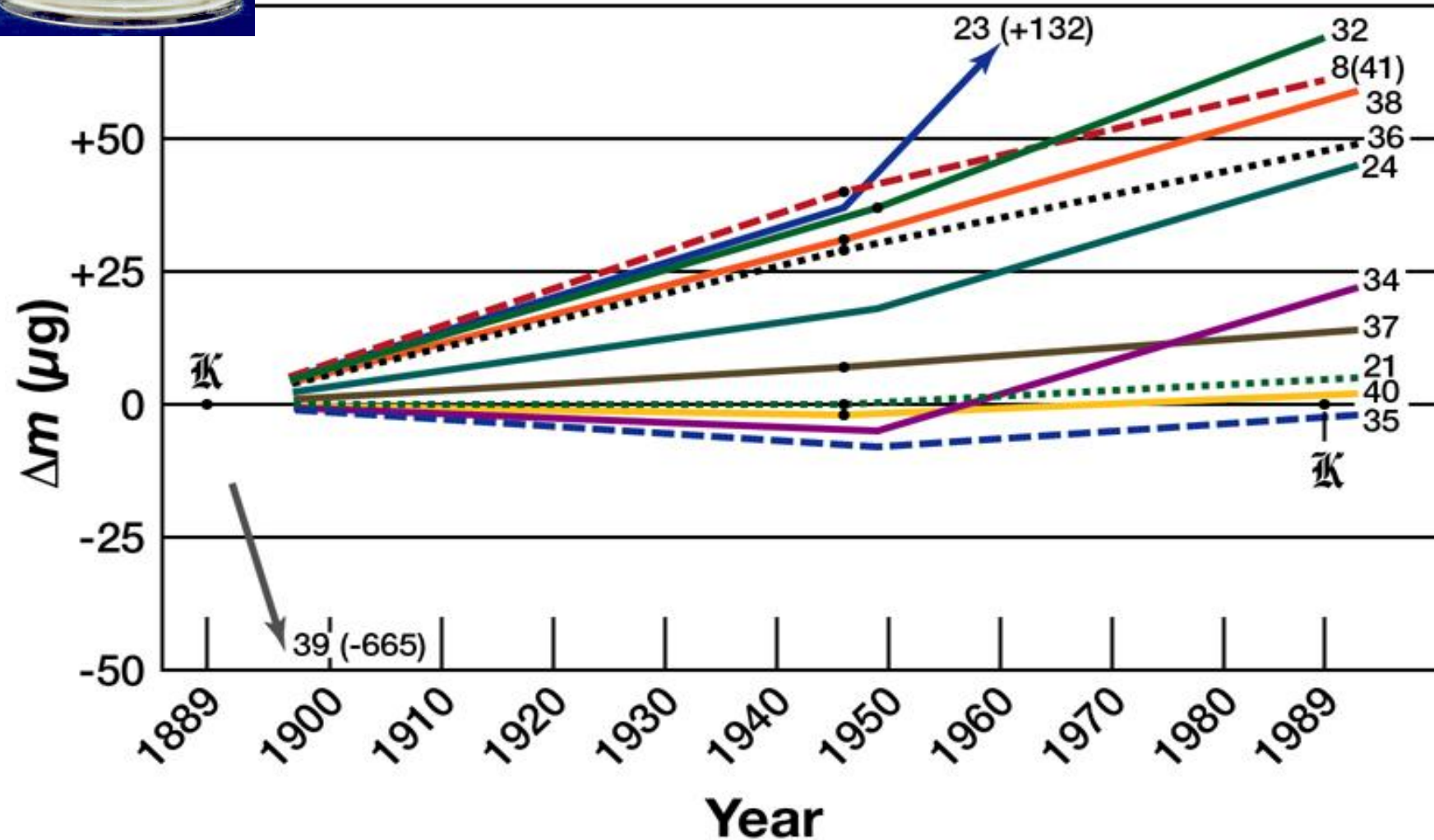
Temperature



Chemical measurement technology

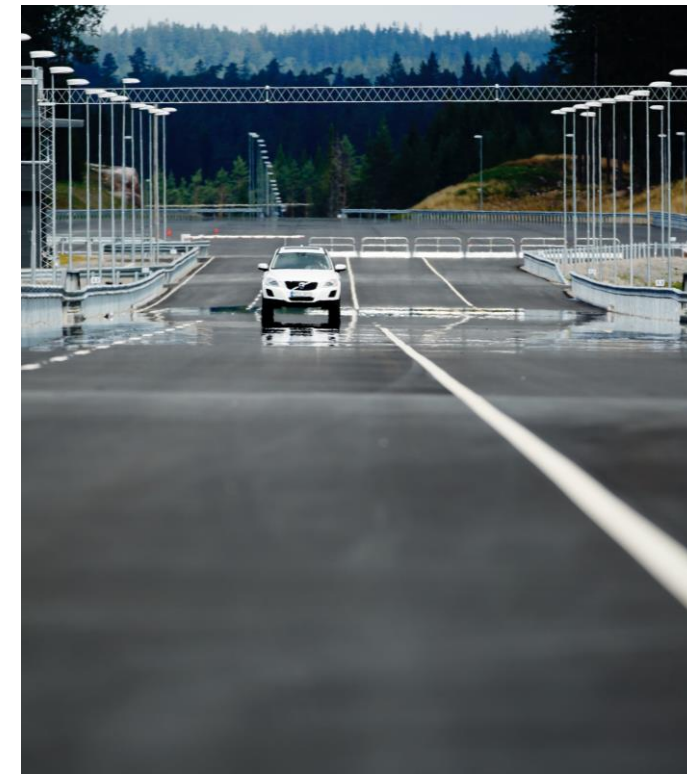


National prototype kilogram



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