

Calibration

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Calibration refers to the process of determining the relation between the output of a measuring instrument and the value of the input quantity or attribute, a measurement standard. In non-specialized use, calibration is often regarded as including the process of adjusting the output or indication on a measurement instrument to agree with value of the applied standard, within a specified accuracy. For example, a thermometer could be calibrated so the error of indication or the correction is determined, and adjusted so that it shows the true temperature in Celsius at specific points on the scale. Calibration also can refer to judgments made by a prognosticator. For example, if a weather forecaster is properly calibrated, it will rain on 80% of the days on which she says "there is an 80% chance of rain today". In many countries a National Metrology Institute will exist which will maintain primary standards of measurement which will be used to provide traceability to customer's instruments by calibration. The NMI supports the metrological infrastructure in that country by establishing an unbroken chain, from the top level of standards to an instrument used for measurement. Examples of National Metrology Institutes are NPL in the UK, NIST in the United States, PTB in Germany and many others. Since the Mutual Recognition Agreement was signed it is now straightforward to take traceability from any participating NMI and it is no longer necessary for a company to obtain traceability for measurements from the NMI of the country in which it is situated. See [<http://www.bipm.org/en/cipm-mra/>] for more information on the Mutual Recognition Agreement. See [<http://www.bipm.org/>] for the international metrology framework. For a calibration to be of any value it must be accompanied by a traceable uncertainty statement to an stated confidence level. This is evaluated through careful uncertainty analysis. In computing, an interactive whiteboard pen or other input method can be calibrated so that relation between the physical pen position and the position of the cursor on the screen is established and properly adjusted.

Recent Publications on Calibration:



- [Elekta Precise Table characteristics of IGRT remote table positioning.](#)
Introduction. Cone beam CT is a powerful tool to ensure an optimum patient... 13th August, 2008
Radiofysisk Laboratorium, Odense University Hospital, Odense C, Denmark.- Acta Oncol. 2008 Aug 29:1-4. ([DOI Direct Link](#))
- [Estimation of cardiovascular risk: a comparison between the Framingham and the SCORE model in people under 60 years of age.](#)
BACKGROUND: The Framingham Heart Study risk model has been used in the... 13th August, 2008
aJulius Center for Health Sciences and Primary Care, University Medical- Eur J Cardiovasc Prev Rehabil. 2008 Aug 27. ([DOI Direct Link](#))
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We propose a new method for calibrating force plates to reduce errors in... 13th August, 2008
Department of Mechanical Engineering, University of Michigan, Ann Arbor,- Gait Posture. 2008 Aug 26. ([DOI Direct Link](#))

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A novel electrochemical method for the detection of bioaffinity... 13th August, 2008
Institute of Biomedical Chemistry, Russian Academy of Medical Sciences,- Biosens Bioelectron. 2008 Jul 15. ([DOI Direct Link](#))
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The rapid, sensitive and simultaneous determination of six polyamines,... 13th August, 2008
Laboratory of Analytical and Bio-Analytical Chemistry, School of- J Chromatogr A. 2008 Aug 13. ([DOI Direct Link](#))
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We analyze the strength of association between aerosol optical depth (AOD)... 13th August, 2008
Department of Biostatistics, Harvard School of Public Health, Boston,- Environ Sci Technol. 2008 Aug 1;42(15):5800-6.
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Quantitative structure-property relationships (QSPRs) are developed to... 13th August, 2008
Department of Chemistry, University of New Mexico, Albuquerque, New Mexico- Environ Sci Technol. 2008 Jul 15;42(14):5210-6.
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The measurement complexities emerging from vertical equating in an... 13th August, 2008
13A, Thasou St., 1087,- J Appl Meas. 2008;9(3):281-304.
- [The impact of data collection design, linking method, and sample size on vertical scaling using the rasch model.](#)
The Rasch model-based vertical scaling was evaluated by simulation study... 13th August, 2008
Educational Testing Service, Roasedale Road, MS-02P, Princeton, NJ 08541,- J Appl Meas. 2008;9(3):229-48.
- [Calibration of multiple-choice questionnaires to assess quantitative indicators.](#)
The joint use of two latent factor methods is proposed to assess a... 13th August, 2008
University of Milan, via Conservatorio 7, 20122 Milan, Italy,- J Appl Meas. 2008;9(3):216-28.
- [A simulation environment for estimation of the performance of RSA cages.](#)
Roentgen stereophotogrammetric analysis (RSA) is an important technique... 13th August, 2008
Laboratory Biomechanics, Istituti Ortopedici Rizzoli, via di Barbiano- Comput Biol Med. 2008 Aug 25. ([DOI Direct Link](#))
- [Using Electrical Impedance Spectroscopy to Detect Water in Planetary Regoliths.](#)
Abstract We present data in examination of the utility of electrical... 13th August, 2008
Jet Propulsion Laboratory, Pasadena, California.- Astrobiology. 2008 Aug 28. ([DOI Direct Link](#))
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A method for the rapid and simultaneous determination of... 13th August, 2008
Department of Pharmacognosy, Heilongjiang University of Chinese Medicine,- Arzneimittelforschung. 2008;58(7):336-41.
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Phytochemicals such as phenolics and flavonoids, which are present in rice... 13th August, 2008
Institute of Statistics, Department of Mathematics, Zhejiang University,- J Agric Food Chem. 2008 Aug 27. ([DOI Direct Link](#))
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The standard method of soft X-ray beamline calibration at the N K-edge... 13th August, 2008
Department of Soil Science, University of Saskatchewan, Saskatoon,- J Synchrotron Radiat. 2008 Sep;15(Pt 5):532-4. Epub 2008 Jul 11. ([DOI Direct Link](#))

BioNews Results for Calibration

- [Spectroscopy: Research conducted at Sankyo Co., Ltd. has provided new information about spectroscopy](#)
NewsRX: Aug 26 2008 2:47AM Matching: calibration
- [Implant Sciences Receives First Order from GSA Schedule Contract](#)
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- [Comparing Calibration Technologies for Liquid-Handling Quality Assurance](#)
Pharmaceutical Technology: Aug 15 2008 6:23PM Matching: calibration
- [Implant Sciences Corporation Awarded GSA Schedule Contract](#)
Genetic Engineering News: Aug 6 2008 4:58PM Matching: calibration
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Express Pharma: Jul 25 2008 12:19PM Matching: calibration
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- [Pharmaceuticals: Analytical & Bioscience Solutions Update](#)
BioResearch Online: Jun 3 2008 5:22PM Matching: calibration
- [Drug testing lab at Baroda gets NABL accreditation](#)
PharmaBiz: Jun 3 2008 3:06AM Matching: calibration

Calibration Clinical Trials:



- [Calibration of Urine pH Strips for NCI Case-Control Studies on Bladder Cancer and Comparison of DNA Yields From Buccal C...](#)
Calibration Intervention: 2 Recruiting Calibration and Validation of the STISIM Driving Simulator

Calibration Patents:



- 7417548- [Adjusting RFID waveform shape in view of signal from an RFID tag](#)
- 7417726- [Normalization of data using controls](#)
- 7417727- [Method and apparatus for standoff detection of liveness](#)
- 7417728- [Full spectrum monitoring for outdoor accelerated weathering device](#)
- 7417731- [Scanning sensor-identifier and standard set-up](#)
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- [7417746- Fabry-perot tunable filter systems and methods](#)
- [7417763- Data processing apparatus and method, and image processing apparatus](#)
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