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## Peer Review Journal Publications

- N. Brown, E. Jaatinen, H.Suh, E. Howick, G. Xu, C.S.Veldman and J-M Chartier, International comparison of HeNe lasers stabilized with <sup>127</sup>I<sub>2</sub> at λ ≈ 633 nm. Part V, Metrologia, 2000, 37, 107-113.
- 2. Veldman C.S., A novel PC based implementation of the sine-approximation method of ISO 16063-11
- 3. Report on key comparison CCAUV.A-K1, Metrologia, 2003, 40, Tech. Suppl., 09002
- 4. Report on key comparison CCAUV.V-K1, Metrologia, 2003, 40, Tech. Suppl., 09001
- 5. Moodley S.S., van den Berg W. and Veldman C.S., Improving the Mechanical Stability of a Standard Capacitor, IEEE Transactions on Instrumentation and Measurement, April 2003, vol 52.
- 6. Veldman C.S., "A novel implementation of an ISO standard for primary vibration calibration by laser interferometer", Metrologia 40 (2003), pp. 1-8.
- 7. Veldman C.S., Von Martens H,.-J, Final report on supplementary comparison SADCMET.AUV.V-S1, Metrologia, 2004, 41, Tech. Suppl., 09001
- 8. Veldman C.S., Implementation of an Accelerometer Transverse Sensitivity Measurement System, NCSLI Measurement, June 2013.
- Veldman C.S., Implementing a Shock Calibration System Using a Vibration Exciter and Pendulum, NCSLI Measurement, March 2014.
- 10. Veldman C.S., Performing Traceable Low Frequency AC Voltage Measurements, NCSLI Measurement, 2014.
- 11. Veldman C.S., Accelerometer transverse sensitivity calibration; validation and uncertainty estimation, ACTA IMEKO, June 2015, Volume 4, Number 2, 52-56.
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- 13. Maina A., Veldman C.S., Final report on the supplementary comparison AFRIMETS.AUV.V-S3, Metrologia, 2012, 49, Tech. Suppl., 09001.
- 14. C.S. Veldman: Accelerometer transverse sensitivity calibration; validation and uncertainty estimation, ACTA IMEKO, Vol 4, No 2 (June 2015).
- 15. Maina A, Veldman C.S., Ploug H., NMISA, KEBS, BKSV tri-lateral vibration comparison results, ACTA IMEKO. Vol 5, No 1 (2016).
- 16. Qiao Sun, Ian Veldman, Final Report of CCAUV.V-K3: Key comparison in the field of Acceleration on the complex charge sensitivity, Metrologia, Volume 50, Technical Supplement.
- 17. Sun Qiao , Ian Veldman, et al: Final report of CCAUV.V-K3: key comparison in the field

- of acceleration on the complex charge sensitivity, Metrologia, Volume 54, Technical Supplement.
- Ian Veldman: Performing accelerometer calibration using homodyne laser interferometry with displacements smaller than a quarter wavelength, ACTA IMEKO, Vol 6, No 4 (2017).
- 19. C.S. Veldman, Establishing primary shock sensitivity capabilities at NMISA, Peer reviewed manuscript Test and Measurement 2018 Conference and Workshop.
- 20. M.K Mutloatse, A. Karsten, C.S Veldman, "Evaluation of site vibrations for AUV laboratory according to vibration criteria", Peer reviewed manuscript Test and Measurement 2018 Conference and Workshop.

## **International Conferences Papers**

- 1. A novel PC based implementation of the sine-approximation method of ISO 16063-11, Presented at a International conference on Metrology (Metrocal 2001) in Chile 2001.
- 2. Veldman C.S., A Novel Implementation of the Sine-Approximation Method for Primary Vibration calibration by laser interferometry, SPIE vol 4827.
- 3. Veldman C.S., Von Martens H,.-J, Phase calibration of laboratory standard accelerometers using laser interferometry, SPIE vol 5503.
- 4. Veldman C.S., The estimation of uncertainties in phase shift measurements using homodyne laser interferometry, SPIE vol 6345, 634502-1 634502-8.
- 5. Veldman C.S., ISO 16063; A Comprehensive set of Vibration and Shock Calibration Standards, IMEKO, 2006.
- 6. Veldman C.S., Traceable low frequency ac voltage measurements, IMEKO 2007.
- 7. Bruns Th, Veldman C.S., A Web-based Data Generator for Software-Validation and Algorithm Comparison in Primary Accelerometer Calibration, IMEKO 2007.
- 8. Veldman C.S., Estimation of Phase Shift Measurement Uncertainties in Interferometric Vibration Calibration, SPIE 2008.
- 9. Veldman C.S., Implementing a Shock Force Calibration System Using A Vibration Exciter And Pendulum, IMEKO 2010.
- Veldman C.S., Accelerometer Transverse Sensitivity Calibration at the NMISA, IMEKO 2014.
- 11. Veldman C.S., Performance evaluation of two low frequency air bearing vibration exciters, IMEKO 2015.

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- 1. Veldman C.S., The National Standard For Sound Pressure In Air: Past, Present And Future, Test and Measurement conference, 2000.
- 2. Veldman C.S., Successive-Approximation Method For Measuring Linear Acceleration, Test and Measurement conference, 2000.
- 3. Veldman C.S., Phase Calibration Of Laboratory Standard Accelerometers, Test and Measurement conference, 2004.
- 4. Veldman C.S., Continuous development of the National standard for vibration, Test and Measurement conference, 2005.
- Veldman C.S., ISO 16063, Your Vibration and Shock Calibration Suite, Test and Measurement conference, 2006.
- 6. Veldman C.S., Performing Traceable Low Frequency AC Voltage Measurements, Test & Measurement Conference 2007.
- 7. Veldman C.S. Hugo J., Maintaining Equipment for Vibration Testing, Test & Measurement Conference 2007.
- 8. Veldman C.S., Implementing a shock-force calibration system, Test & Measurement Conference, 2009.
- 9. Veldman C.S., Implementation of an accelerometer transverse sensitivity measurement system, Engineering Community Conference, 2012.
- Veldman C.S., Metrology 101: Calibration Basics, Engineering Community Conference, 2014.
- 11. T.M. Lefenya, Veldman C.S., "Performance Evaluation of an Air Bearing Vibration Exciter Linear Translation Stage", Test & Measurement Conference, 2014.
- 12. Veldman C.S., "Evaluation and Comparison of Two Air Bearing Linear Translation Stages", Test & Measurement Conference, 2015.

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- 1. Veldman C.S., National Metrology Laboratory Your Measurement Technology Partner for Global Competitiveness.
- 2. Veldman C.S., Calibration of Tachometers.
- 3. Veldman C.S., The cost of Vibration Calibration to Industry.
- 4. Veldman C.S., Low Frequency Absolute Vibration Standard.
- 5. Veldman C.S., The National Standard For Sound Pressure In Air: Past, Present And Future.
- 6. Veldman C.S., An Automated Reciprocity System For The Pressure Calibration Of 1" Condenser Microphones.
- 7. Veldman C.S., Successive-Approximation Method For Measuring Linear Acceleration.
- 8. Veldman C.S., ISO 16063; A Comprehensive set of Vibration and Shock Calibration Standards.
- 9. Veldman C.S., National standard for vibration re-locate.
- 10. Technical Protocol of the Supplementary comparison SADCMET.AUV.V-S1 (Vibration). CSIR-NML, C.S. Veldman, July 2003.

#### **Technical Articles**

- 1. Absolute accelerometer calibration facility.
- 2. Acoustics and Vibration comes full circle.
- 3. Consultative Committee on Acoustics Ultrasound and Vibration formed.
- 4. Making sense out of sensor calibration, Electron, January 2004.
- 5. Phase calibration of laboratory standard accelerometers, Electron, June 2005.
- 6. Continuous development of the national standard for vibration, Electron, April 2006
- 7. The International Organization for Standardization, what is it all about, June 2006
- 8. National Metrology Laboratory, Your Measurement Technology Partner for Global Competitiveness.
- 9. Accelerometer Transverse Sensitivity Calibration at the NMISA, Engineering IT, 2014.
- 10. Accelerometer transverse sensitivity measurement system, Engineering IT, 2012.