

Joint List of Publications from DFM and BKSv-DPLA

List of publications from 2019 - 2025

Refereed publications

28. oktober 2025

Authors:

Leonard Klaus, Jacob H. Winther, Micheala Schwardt, Lars Cerenna, Franck Larsonnie; *"Good Practice Guide - Measurement traceability for seismo-acoustic and hydroacoustics sensor systems deployed in the International Monitoring System"* <https://www.ptb.de/empir2020/infra-auv/information-communication/publications/good-practice-guide/>

Leonard Klaus, Jacob H. Winther Primary Calibration of Broadband Seismometers as part of the traceability chain for the International Monitoring System, (METROLOGIA) IOP Publishing, Measurement Science and Technology, September 202233(12), DOI:10.1088/1361-6501/ac9077

Jacob H. Winther, Andreas Havreland, Torben R. Licht; "SECONDARY CALIBRATION USING GABRIELSONS METHOD & COPA WITH BACKGROUND NOISE AT A LABORATORY FACILITY" XXIV IMEKO World Congress "Think Metrology" August 26 to 29, 2024, Hamburg, Germany. <https://doi.org/10.1016/j.measen.2024.101758>

Jacob Holm. Winther, Alessandro Schiavi, Ronaldo S. Dias, Adrien Canu; "ILC INVESTIGATION AND IN-FIELD TRACEABILITY USING A HIGH SENSITIVITY & HIGH MASS GEOPHONE SET" XXIV IMEKO World Congress "Think Metrology" August 26 to 29, 2024, Hamburg, Germany. <https://doi.org/10.1016/j.measen.2024.101759>

Freya Malcher, Ben Ford, Richard Barham, Stephen Robinson, Jake Ward, Lian Wang, Angus Bridges, Andrew Yacoot, Sei Him Cheong, Dominique Rodrigues, Salvador Barrera-Figueroa, A CALCULABLE PISTONPHONE FOR THE ABSOLUTE CALIBRATION OF HYDROPHONES IN THE FREQUENCY RANGE FROM 0.5 Hz TO 250 Hz, Metrologia, **61** (2), DOI 10.1088/1681-7575/ad2d5a (2024)

Jacob H. Winther, Martin Brucke, Martin Thalbitzer Andersen and T. R. Licht, RECENT STUDY IN PRIMARY ACCELEROMETER CALIBRATION - PROGRESS, DEVELOPMENT AND LESSONS LEARNED, IMEKO 24th TC3, 14th TC5, 6th TC16 and 5th TC22 International Conference 11 – 13 October 2022, Cavtat-Dubrovnik, Croatia

Jacob H. Winther, T. R. Licht and Thalbitzer Andersen, *PROGRESS IN THE REALISATION OF ULTRA- LOW FREQUENCY CALIBRATIONS XXIII IMEKO World Congress "Measurement: sparking tomorrow's smart revolution", August 30 – September 3, 2021, Yokohama, Japan*

Dominique Rodrigues, Peter Rosenkranz, Salvador Barrera-Figueroa, Claudio Guglielmo, Zemar Soares Defilippo, Christoph Kling, SUPPLEMENTARY COMPARISON EURAMET.AUV.A-S2, Metrologia, **57** (1A), DOI 10.1088/0026-1394/57/1A/09001 (2020)

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Jacob H. Winther, Henrik Ingerslev and Søren Andresen, *DIGITAL SIGNAL PROCESSING FUNCTIONS FOR ULTRA- LOW FREQUENCY CALIBRATIONS*, IMEKO 24th TC3, 14th TC5, 6th TC16 and 5th TC22 International Conference 2020-05-05 – 2020-05-07, Cavtat-Dubrovnik, Croatia – (postponed)

Ch. N. Christensen, Y. Zainchkovskyy, S. Barrera-Figueroa, A. Torras-Rosell, G. Marinelli, K. Sommerlund-Thorsen, J. Kleven, K. Kleven, E. Voll, J. Petersen, and M. Lassen, “Simple and robust speckle detection method for fire and heat detection in harsh environments,” *Applied Optics* 58(28), pp. 7760-7765, <https://doi.org/10.1364/AO.58.007760>, (2019).

Conference papers

Leonard Klaus, Jacob H. Winther, Franck Larssonier, Thomas Bruns; “Challenges of Low Frequency Seismometer Calibrations”, EGU23-13404 submitted to NH8.1 – International Monitoring System and On-site Verification for the CTBT, disaster risk reduction and Earth sciences, CTBT Science and Technology Conference 2023 (SnT2023), Vienna

Erling Sandermann Olsen, *Extension of reciprocity calibration of microphones to frequencies below 1 Hz*, EGU General Assembly 2023, Vienna, Austria, 23–28 Apr 2023, EGU23-13793, <https://doi.org/10.5194/egusphere-egu23-13793>, 2023.

Klaus, L., Larssonier, F., Winther, J. H., Schwardt, M., Kobusch, M., and Bruns, T.: Traceable Calibration of Seismometers, EGU General Assembly 2023, Vienna, Austria, 23–28 Apr 2023, EGU23-13404, <https://doi.org/10.5194/egusphere-egu23-13404>, 2023.

Erling Sandermann Olsen. *Next steps in development of transfer impedance calculation of couplers for reciprocity calibration of laboratory standard microphones*, Forum Acusticum, Dec 2020, Lyon, France. pp.2233-2239, [ff10.48465/fa.2020.1023ff](https://doi.org/10.48465/fa.2020.1023ff). [ffhal-03231903](https://doi.org/10.48465/fa.2020.1023ff)

Erling Sandermann Olsen, Dominique Rodrigues, Christoph Kling, Marvin Rust, Franck Larssonier, Paul Vincent and Richard Barham. *Establishing traceability for Infrasound: Calibration Innovations and Inter-Laboratory Comparisons from the Infra-AUV Project*, CTBTO Infrasound Technology Workshop 2024, Vienna, Austria, 4–8 November 2024

Erling Sandermann Olsen and Henrik Birch Carlsen. *Establishing a service for calibration of low frequency transfer standard microphones in the frequency range 10 mHz to 250 Hz*, CTBTO Science and Technology Conference 2025 (e-poster), Vienna, Austria, 8–12 September 2025

Jacob H. Winther and Torben R. Licht, *Primary calibration of Reference Standard back-to-back vibration transducers using modern calibration standard vibration exciters*, IMEKO 23rd TC3, 13th TC5 and 4th TC22 International Conference, 2017, Helsinki, Finland

S. Barrera-Figueroa, V. Cutanda Henríquez, and A. Torras-Rosell, *Environmental coefficients of the free-field sensitivity of measurement microphones*, Internoise 2017, Hong Kong, 2017.

V. Cutanda Henríquez, S. Barrera-Figueroa, and P. R. Andersen, *Boundary Element Method with Viscous and Thermal Losses: A Calibration Microphone Test Case*, 13th International Conference on Theoretical and Computational Acoustics, Vienna, Austria, 2017.

S. Barrera-Figueroa, *Pressure calibration of WS3 microphones*, International Congress on Sound and Vibration, 2018.

S. Barrera-Figueroa, *Establishing traceability for airborne ultrasound measurements*, Euronoise 2018.

S. Barrera-Figueroa, *Making pressure calibration easier – strategies for calibration of measurement microphones*, 48th International Congress and Exhibition on Noise Control Engineering (Internoise 2019), Madrid, Spain

M. Enge, C. Hof, S. Barrera-Figueroa, *Establishing new types of LS2P microphones as reference standards*, 48th International Congress and Exhibition on Noise Control Engineering (Internoise 2019), Madrid, Spain

V. Cutanda-Henríquez, P. Møller-Juhl, S. Barrera-Figueroa, *Modeling of measurement condenser microphones at low frequencies: numerical issues*, 48th International Congress and Exhibition on Noise Control Engineering (Internoise 2019), Madrid, Spain

P. Møller-Juhl, V. Cutanda-Henríquez, S. Barrera-Figueroa, *On the modelling of cavities at low frequencies with the BEM*, 48th International Congress and Exhibition on Noise Control Engineering (Internoise 2019), Madrid, Spain

S. A. Verburg, E. Fernández-Grande, S. Barrera-Figueroa, *Acousto-optic sensing of the sound field in a lightly damped room*, 48th International Congress and Exhibition on Noise Control Engineering (Internoise 2019), Madrid, Spain

S. Barrera-Figueroa, *Completing the Traceability Chain for Airborne Ultrasound*, The 23rd International Congress on Acoustics 2019 (ICA 2019), Aachen, Germany.

S. Barrera-Figueroa, A. Biber, A. C. Çorakçı, A. Golick, S. Robinson, G. Hayman, J. Ablitt, S. Buogo, S. Mauro, F. Borsani, S. Curcuruto, M. Linné, P. Sigray, P. Davidsson, *Designing a comparison coupler for low-frequency calibration of hydrophones in air*, 2019 IMEKO TC-19 International Workshop on Metrology for the Sea (METROSEA), Genoa, Italy.