

INMETRO - DIVISION OF ACOUSTICS AND VIBRATION METROLOGY

LIST OF TECHNICAL PUBLICATIONS IN THE PERIOD 2010 – 2019

ELECTROACOUSTICS:

- SOARES, Z.M.D.; SILVA, I.F.C; ESPIRITO-SANTO, N.M.; “**Maximum Measurement Uncertainty: Hearing Aids**”. In: Proc. of the 23rd International Congress on Acoustics (ICA 2019), 09-13 September 2019, Aachen, Germany.
- MILHOMEM, T.A.B.; SOARES, Z.M.D.; “**Experimental determination of the difference between diffuse and pressure field sensitivities of half-inch laboratory standard microphones**”. In: Proc. of 48th International Congress and Exhibition on Noise Control Engineering (Internoise 2019), 16-19 June 2019, Madrid, Spain.
- MILHOMEM, T.A.B.; SOARES, Z.M.D.; MUSAFIR, R.E.; MÜLLER, S.; “**Diffuse-field reciprocity calibration of half-inch laboratory standard microphones using simultaneous reverberation time measurement**”. The Journal of the Acoustical Society of America 143, 3658 (2018); doi: 10.1121/1.5043395.
- SOARES, Z.M.D.; MASSON, Z.N.; PAUL, S.; “**Quality assurance of hearing aids in Brazil**”, In: Proc. of SOBRAC 2018, paper #83853, 3-5 October 2018, Porto Alegre, Brazil (In Portuguese: Garantia da Qualidade dos Aparelhos de Amplificação Sonora Individual no Brasil).
- PINTO, E.B.; SOARES, Z.M.D.; “**Periodic verification of Sound Level Meters: Acoustic performance of frequency weighting**”, In: Proc. of SOBRAC 2018, paper #84015, 3-5 October 2018, Porto Alegre, Brazil (In Portuguese: Verificação Periódica de Sonômetros: Desempenho Acústico da Ponderação em Frequência).
- MILHOMEM, T.A.B.; SOARES, Z.M.D.; “**Microphone calibration in infrasonic frequencies**”, In: Proc. of SOBRAC 2018, paper #83320, 3-5 October 2018, Porto Alegre, Brazil (In Portuguese: Calibração de Microfones em Frequências Infrassônicas).
- MILHOMEM, T.A.B.; SOARES, Z.M.D.; “**Proficiency test on the calibration of sound level meter sets - PEP 001/2014**”, In: Proc. of SOBRAC 2018, paper #83321, 3-5 October 2018, Porto Alegre, Brazil (In Portuguese: Ensaio de Proficiência na Calibração de Sonômetros e Dispositivos que o Acompanham – PEP 001/2014).
- MILHOMEM, T.; SOARES, Z.M. D.; MUSAFIR, R.; MULLER, S.; “**Electrical crosstalk subtraction for free field reciprocity calibration of half inch laboratory standard microphones**”. The Journal of the Acoustical Society of America 141, 3132 (2017); doi: 10.1121/1.4983005.
- MASSON, Z.N.; BRESCIANI, E.C.; PAUL, S.; CORDIOLI, J.A.; SOARES, Z., ESPIRITO SANTO, N.M.; “**Bilateral comparison of hearing aids electroacoustics performance results according to ABNT NBR IEC 60118-8:2014**”, In: Proc. of SOBRAC 2017, XXVII Encontro da Sociedade Brasileira de Acústica, May 2017, Brasília-DF (In Portuguese: Comparação bilateral de resultados de performance eletroacústica de um aparelho de amplificação sonora individual segundo a ABNT NBR IEC 60118-8:2014).
- KLING, C.; FEDTKE, T.; SOARES, Z.; MILHOMEM, T.; “**Metrology for infrasound measurements**”. In: Proc. of the 24th International Congress on Sound and Vibration - ICSV24, July 2017, London, UK.
- KLING, C.; WIECZOREK, J.; MILHOMEM, T; SOARES, Z.; “**An Investigation on Microphone Calibration at Infrasound Frequencies**”. Internal Report - Bilateral Project for Strengthening the Quality Infrastructure for Renewable Energies and Energy Efficiency in Brazil, Technical cooperation between PTB and Inmetro, 2017.

- MILHOMEM, T.A.B.; SOARES, Z.M.D.; “**Calibration of sound calibrators: An overview**”. Journal of Physics. Conference Series (Print), v.733, p.012055, 2016, doi:10.1088/17426596/733/1/012055
- NEL, R.; BARRERA FIGUEROA, S.; DOBROWOLSKA, D.; DEFILIPPO SOARES, Z.M; MAINA, A.K.; HOF, C.; “**Final Report of Supplementary Comparison AFRIMETS.AUV.A-S1: primary pressure calibration of LS2aP microphones according to IEC610942, over the frequency range 1 Hz to 31.5 kHz**”. Metrologia, Vol. 53, Tech. Suppl., 09001, 2016, <https://doi.org/10.1088/0026-1394/53/1A/09001>.
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- FONTES, V.; ZAJARKIEVAIECH, J.E.B.; SOARES, Z.; SANTO, N.M.E. “**A quality overview of audiometer calibration in Brazil**” In: Proc. of the 15º Congresso da Fundação Otorrinolaringologia, Campos do Jordão, Brazil, 2016.
- MILHOMEM, T.; SOARES, Z.; MUSAFIR, R.; “**An Investigation about the Effect of Diffusivity of Sound Field for Reciprocity Calibration of Measurement Microphones in Diffuse field**”. In: Proc. of Internoise 2016 - 45th International Congress and Exposition on Noise Control Engineering, 2016, Hamburg, Germany.
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- MILHOMEM, T.; SOARES, Z.; PINTO, E.B.; MOURA, M.H.; “**Ensaio de proficiência na calibração de medidores de nível sonoro e dispositivos que o acompanham**” – Relatório Final PEP 001/2014, Inmetro, Comissão Técnica de Acústica e Vibrações – CT 12 da Coordenação Geral de Acreditação – Cgcre, 17 June 2016.
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ACOUSTICAL TESTING:

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- VILLELA, R.L.A.; “**Valoração do Custo Social do Ruído Ambiental de Sistemas de Transporte**”. In: Proc. of SOBRAC 2017, XXVII Encontro da Sociedade Brasileira de Acústica, May 2017, Brasilia-DF.
- VILLELA, R.L.A.; “**Redefinition of correlated input quantities: an effective technique for uncertainty evaluation**”. In: Proc. of Metrologia 2015, 8º Congresso Brasileiro de Metrologia, Bento Gonçalves, 2015 (In Portuguese: Redefinição de grandezas de entrada correlacionadas: uma técnica eficaz para avaliação de incerteza).
- VILLELA, R.; ZINDELUK, M.; “**Detection of Holes in Duct Walls by Acoustic Impulse-Response Technique**”. In: Proc. 7th Forum Acusticum 2014, 07-12 September, Krakow, Poland.
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 - MASSARANI, P.M; “**Evaluation of the participation in an interlaboratory comparison on measurements of sound absorption in tubes**”. In: Proc. XXIV Encontro da Sociedade Brasileira de Acústica – SOBRAC 2012, May 29 – June 1st, 2012, Belém-PA, Brazil (In Portuguese: Avaliação da participação em uma comparação de laboratórios para ensaios de absorção sonora em tubos).
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