

40 years
of OHS
Research

2020

Production Catalogue



Institut de recherche
Robert-Sauvé en santé
et en sécurité du travail

Journal Articles (38)

Alam, M., Chaallal, O. & Galy, B. (2020). Protection practices for trench and excavation in Quebec sensitive clay soils: Review of codes, guidelines, and research needs. *Safety Science*, *131*. doi: 10.1016/j.ssci.2020.104918

Aubin, S., Hamdi, E. M., Joly, A., Sarazin, P., Lesage, J., Breau, L., . . . Gagné, S. (2020). On site comparison of the OSHA 42, Asset EZ4-NCO, Iso-Chek, DAN and CIP10 methods for measuring toluene diisocyanate (TDI) at a polyurethane foam factory. *Journal of Occupational and Environmental Hygiene*, *17*(5), 207-219. doi: 10.1080/15459624.2020.1731518

Aubin, S., Hamdi, E. M., Joly, A., Sarazin, P., Lesage, J., Breau, L., . . . Gagné, S. (2020). On-site comparison of the OSHA 47, Asset EZ4-NCO, Iso-Chek, DAN, and CIP10 methods for measuring methylene diphenyl diisocyanate (MDI) at an oriented-strand board (OSB) factory. *Journal of Occupational and Environmental Hygiene*, *17*(11-12), 560-573. doi: 10.1080/15459624.2020.1834111

Bonnet, F., Nélisse, H., Nogarolli, M. & Voix, J. (2020). Individual in situ calibration of in-ear noise dosimeters. *Applied Acoustics*, *157*. doi: 10.1016/j.apacoust.2019.107015

Bosson-Rieutort, D., Sarazin, P., Bicout, D., Ho, V. & Lavoué, J. (2020). Occupational co-exposures to multiple chemical agents from workplace measurements by the US Occupational Safety and Health Administration. *Annals of Work Exposures and Health*, *64*(4), 402-415. doi: 10.1093/annweh/wxaa008

Brochot, C., Abdolghader, P., Haghigat, F. & Bahloul, A. (2020). Performance of mechanical filters used in general ventilation against nanoparticles. *Science and Technology for the Built Environment*, *26*(10), 1387-1396. doi: 10.1080/23744731.2020.1787085

Brochot, C., Haghigat, F. & Bahloul, A. (2020). Comparative performance of the NanoScan and the classic SMPS in determining N95 filtering facepiece efficiency against nanoparticles. *Aerosol Science and Engineering Journal*, *4*, 178-191. doi: 10.1007/s41810-020-00064-4

Brochot, C., Saidi, M. N. & Bahloul, A. (2020). How effective is the filtration of 'KN95' filtering facepiece respirators during the COVID-19 pandemic? *Annals of Work Exposures and Health*. doi: 10.1093/annweh/wxaa101

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Carillo, K., Doutres, O. & Sgard, F. (2020). Theoretical investigation of the low frequency fundamental mechanism of the objective occlusion effect induced by bone-conducted stimulation. *Journal of the Acoustical Society of America*, *147*(5), 3476-3489. doi: 10.1121/10.0001237

Ceballos, D. M., Côté, D., Bakhiyi, B., Flynn, M. A., Zayed, J., Gravel, S., . . . Labrèche, F. (2020). Overlapping vulnerabilities in workers of the electronics recycling industry formal sector: A commentary. *American Journal of Industrial Medicine*, *63*(11). doi: 10.1002/ajim.23173

da Silveira Fleck, A., Catto, C., L'Espérance, G., Masse, J.-P., Roberge, B. & Debia, M. (2020). Characterization and quantification of ultrafine particles and carbonaceous components from occupational exposures to diesel particulate matter in selected workplaces. *Annals of Work Exposures and Health*, *64*(5), 490-502. doi: 10.1093/annweh/wxaa027

Denis, D., Gonella, M., Comeau, M. & Lauzier, M. (2020). Questioning the value of manual material handling training: A scoping and critical literature review. *Applied Ergonomics*, *89*. doi: 10.1016/j.apergo.2020.103186

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Durand, M.-J., Coutu, M.-F., Sylvain, C., Gouin, M.-M., Bilodeau, K., Kirouac, L., . . . Côté, D. (2020). Insights into the sustainable return to work of aging workers with a work disability: An interpretative description study. *Journal of Occupational Rehabilitation*. doi: 10.1007/s10926-020-09894-y

Galy, B. & Lan, A. (2020). Strength of temporary wooden guardrails installed on open joists and prefabricated walls. *Practice Periodical on Structural Design and Construction*, *25*(2). doi: 10.1061/(ASCE)SC.1943-5576.0000473

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Gragnano, A., Villotti, P., Larivière, C., Negrini, A. & Corbière, M. (2020). A systematic search and review of questionnaires measuring individual psychosocial factors predicting return to work after musculoskeletal and common mental disorders. *Journal of Occupational Rehabilitation*. doi: 10.1007/s10926-020-09935-6

Gravel, S., Lavoué, J., Bakhiyi, B., Lavoie, J., Roberge, B., Patry, L., . . . Labrèche, F. (2020). Multi-exposures to suspected endocrine disruptors in electronic waste recycling workers: Associations with thyroid and reproductive hormones. *International Journal of Hygiene and Environmental Health*, *225*. doi: 10.1016/j.ijheh.2019.113445

Haghghi, A., Jocelyn, S. & Chinniah, Y. (2020). Testing and improving an ISO 14119-inspired tool to prevent bypassing safeguards on industrial machines. *Safety*, *6*(3). doi: 10.3390/safety6030042

Lalumière, M., Larivière, C., Nadeau, M.-J., Paquette, P., Lamontagne, M., Desmeules, F. & Gagnon, D. H. (2020). Proposing a minimal data set of musculoskeletal ultrasound imaging biomarkers to inform clinical practice: An analysis founded on the Achilles tendon. *Ultrasound in Medicine & Biology*, *46*(9), 2222-2235. doi: 10.1016/j.ultrasmedbio.2020.04.024

Larivière, C., Preuss, R., Gagnon, D. H., Mecheri, H. & Henry, S. M. (2020). Structural remodelling of the lumbar multifidus, thoracolumbar fascia and lateral abdominal wall perimuscular connective tissues: A cross-sectional and comparative ultrasound study. *Journal of Bodywork and Movement Therapies*, *24*(4), 293-302. doi: 10.1016/j.jbmt.2020.07.009

Lebeau, M., Duguay, P., Boucher, A. & Busque, M.-A. (2020). The impact of compensation data maturity on OHS indicators. *Safety Science*, *121*, 542-549. doi: 10.1016/j.ssci.2019.09.025

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Muller, A., Pontonnier, C., Robert-Lachaine, X., Dumont, G. & Plamondon, A. (2020). Motion-based prediction of external forces and moments and back loading during manual material handling tasks. *Applied Ergonomics*, *82*. doi: 10.1016/j.apergo.2019.102935

Nastasia, I., Coutu, M.-F., Rives, R., Dubé, J., Gaspard, S. & Quilicot, A. (2020). Role and responsibilities of supervisors in the sustainable return to work of workers following a work-related musculoskeletal disorder. *Journal of Occupational Rehabilitation*. doi: 10.1007/s10926-020-09896-w

Nguyen, L., Gravel, S., Labrèche, F., Bakhiyi, B., Verner, M.-A., Zayed, J., . . . Diamond, M. (2020). Can silicone passive samplers be used for measuring exposure of e-waste workers to flame retardants? *Environmental Science & Technology*, *54*(23), 15277-15286. doi: 10.1021/acs.est.0c05240

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Viegas, C., Dias, M., Almeida, B., Caetano, L. A., Carolino, E., Quintal-Gomes, A., . . . Viegas, S. (2020). Are workers from waste sorting industry really protected by wearing filtering respiratory protective devices?: The gap between the myth and reality. *Waste Management Journal*, 102, 856-867. doi: 10.1016/j.wasman.2019.12.001

Conference - Proceedings (1)

Nastasia, I., Coutu, M.-F., Rives, R., Dubé, J. & Gaspard, S. (2020). Supervisor's roles and responsibilities in preventing prolonged disability in workers with musculoskeletal disorders. In *Advances in physical, social & occupational ergonomics: Proceedings of the AHFE 2020 Virtual Conferences on Physical Ergonomics and Human Factors, Social & Occupational Ergonomics and Cross-Cultural Decision Making, July 16–20, 2020, USA*, W. Karwowski, R. S. Goonetilleke, S. Xiong, R. H. Goossens & A. Murata (Eds.), (p. 95-101). Cham, Suisse: Springer. doi: 10.1007/978-3-030-51549-2_13

Villotti, P., Gragnano, A., Larivière, C., Negrini, A., Dionne, C. & Corbière, M. (2020). Tools appraisal of organizational factors associated with return-to-work in workers on sick leave due to musculoskeletal and common mental disorders: A systematic search and review. *Journal of Occupational Rehabilitation*. doi: 10.1007/s10926-020-09902-1

Yao, Y., Rakheja, S., Larivière, C. & Marcotte, P. (2020). Assessing increased activities of the forearm muscles due to anti-vibration gloves: Construct validity of a refined methodology. *Human Factors*. doi: 10.1177/0018720820948303

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Conference - Article (1)

Dolez, P. I., Decaens, J., Buns, T., Lachapelle, D. & Vermeersch, O. (2020). Applications of smart textiles in occupational health and safety. *IOP Conference Series: Materials Science and Engineering*, 827. Retrieved from <https://iopscience.iop.org/article/10.1088/1757-899X/827/1/012014/pdf>

Conferences (13)

Benacchio, S., Sgard, F. & Doutres, O. (2020). *Numerical modeling of the vibro-acoustic behavior of an artificial ear dedicated to the study of hearing protectors*. Paper presented at the Forum Acusticum 2020, Lyon, France.

Carillo, K., Doutres, O. & Sgard, F. (2020). *A finite element model to study the earplug contribution to the objective occlusion effect*. Paper presented at Acoustics Virtually Everywhere: The 179th Acoustical Society of America Meeting, Chicago, IL.

Doutres, O., Terroir, J., Jolly, C., Gauvin, C., Martin, L. & Negrini, A. (2020). *Towards a metatheory explaining hearing protection device use among workers*. Paper presented at Acoustics Virtually Everywhere: The 179th Acoustical Society of America Meeting, Chicago, IL.

Faye, C. & Bouchard, N. (2020). *Transfert inter-organisationnel de connaissances issues d'enquêtes d'accident du travail et prise en charge de la santé et de la sécurité du travail*. Paper presented at the XXIX^e Conférence Internationale de Management Stratégique, Toulouse, France.

Faye, C. & Desjardins, F. (2020). *Analyse de la capacité d'absorption dans le cadre d'un transfert inter-organisationnel de connaissances issues d'enquêtes d'accidents du travail*. Paper presented at the Administrative Sciences Association of Canada (ASAC) 2020 Conference, Saint-Jean, NL.

Gauvin, C., Li, Y., Roshan Fekr, A. & Dutta, T. (2020). *Analysis of test methods to determine footwear slip resistance on melting and cold ice surfaces*. Paper presented at the Slips, Trips & Falls Conference, Madrid, Spain.

Jocelyn, S. (2020). *Occupational health and safety (OHS) in collaborative robotics to inspire circular industrial system designers*. Paper presented at the Séminaire «CIRCULAR» sur l'exploitation des technologies de l'Industrie 4.0 pour promouvoir l'économie circulaire, Autrans, France.

Book Chapters (2)

Côté, D., Dubé, J. & Arsenault, M. (2020). L'approche ethnographique : illustration dans un contexte de réadaptation au travail. In M. Corbière & N. Larivière (Eds.), *Méthodes qualitatives, quantitatives et mixtes dans la recherche en sciences humaines, sociales et de la santé* (2nd ed., p. 97-126). Québec, QC: Presses de l'Université du Québec.

Luan, Y., Sgard, F., Nélisse, H. & Doutres, O. (2020). *Study of the decrease in the earplug noise reduction when worn in combination with an earmuff*. Paper presented at Acoustics Virtually Everywhere: The 179th Acoustical Society of America Meeting, Chicago, IL.

Pocachard, J., Jocelyn, S., Jouve, C. & Klement, N. (2020). *Reconfigurable workstation for human-robot collaboration during the development and manufacturing phases: Use case*. Paper presented at the IEEE International Conference on Robotics and Automation, Paris, France.

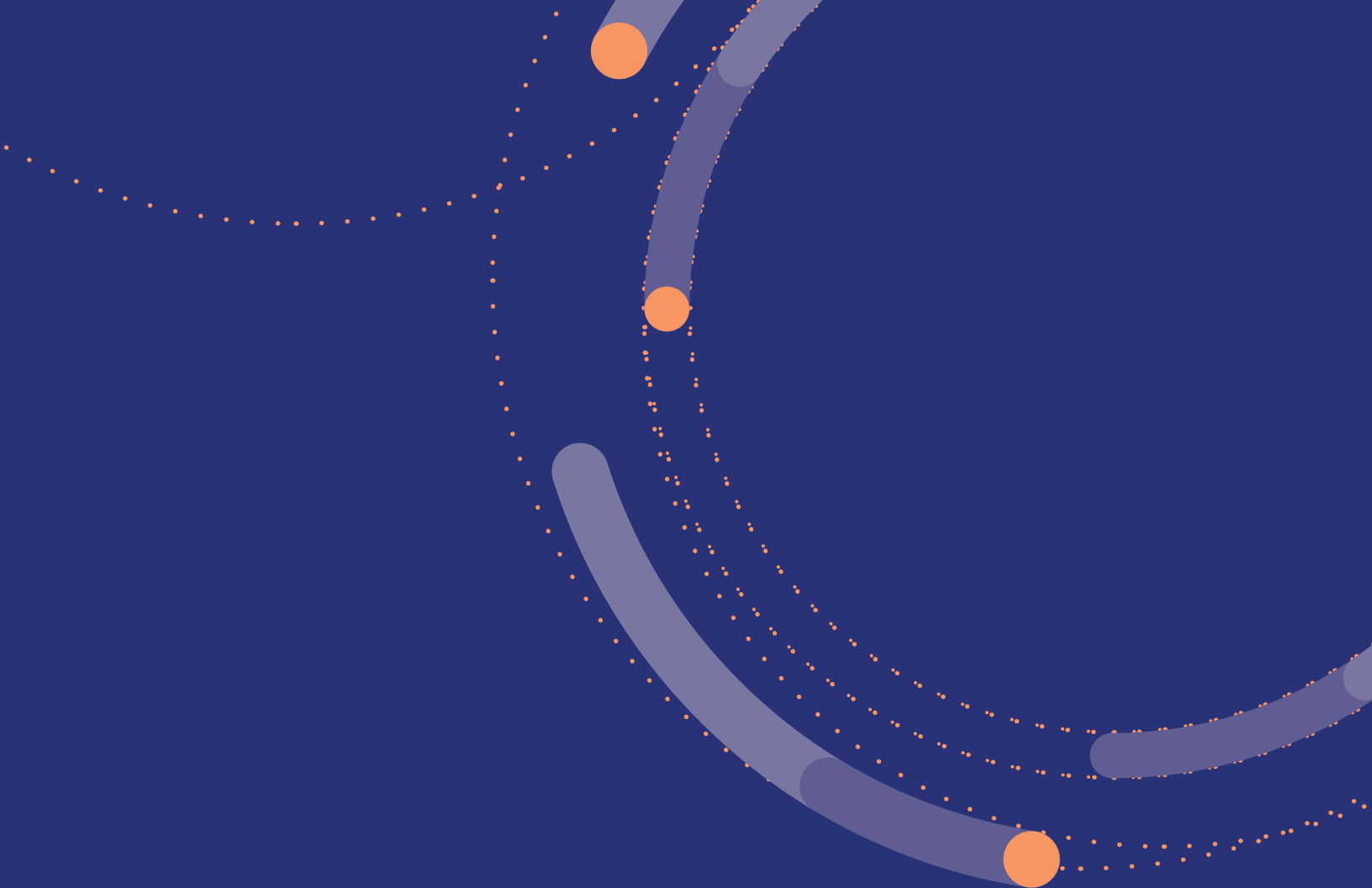
Poissenot-Arrigoni, B., Law, C., Sgard, F. & Doutres, O. (2020). *Earcanal anthropometry analysis for the design of realistic artificial ears*. Paper presented at Acoustics Virtually Everywhere: The 179th Acoustical Society of America Meeting, Chicago, IL.

Poissenot-Arrigoni, B., Law, C., Sgard, F. & Doutres, O. (2020). *Preserving workers' hearing health by improving earplug efficiency*. Paper presented at Acoustics Virtually Everywhere: The 179th Meeting of the Acoustical Society of American, Chicago, IL. Retrieved from <https://acoustics.org/5ansa4-preserving-workers-hearing-health-by-improving-earplug-efficiency-bastien-poissenot-arrigoni/>

Saidi, A. (2020). *Les équipements de protection intelligents dans l'ère de l'Industrie 4.0*. Paper presented at Montreal Connect 2020, Montréal, QC. Retrieved from https://www.youtube.com/watch?v=GACJv5h30T0&feature=emb_title

Xu, H., Sgard, F., Carillo, K., Wagnac, É. & De Guise, J. (2020). *Evaluation of an anatomically correct human head finite element model for predicting the occlusion effect induced by earplugs*. Paper presented at Acoustics Virtually Everywhere: The 179th Acoustical Society of America Meeting, Chicago, IL.

Negrini, A., Perron, J. & Perron, B. (2020). Analyse de classification par regroupement : description et application à une problématique d'équilibre travail-famille et de détresse psychologique. In M. Corbière & N. Larivière (Eds.), *Méthode qualitative, quantitatives et mixtes dans la recherche en sciences humaines, sociales et de la santé* (2nd ed., p. 421-446). Québec, QC: Presses de l'Université du Québec.



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