VII. REFERENCES

[1] Y.-C. Wu, C.-S. Chen, and Y.-J. Chan, "The outbreak of COVID-19: An overview," *J. Chin. Med. Assoc.*, vol. 83, no. 3, pp. 217–220, Mar. 2020, doi: 10.1097/JCMA.0000000000000270.

[2] S. Kooraki, M. Hosseiny, L. Myers, and A. Gholamrezanezhad, "Coronavirus (COVID-19) Outbreak: What the Department of Radiology Should Know," *J. Am. Coll. Radiol.*, vol. 17, no. 4, pp. 447–451, Apr. 2020, doi: 10.1016/j.jacr.2020.02.008.

[3] "Archived: WHO Timeline - COVID-19." https://www.who.int/news/item/27-04-2020-who-timeline---covid-19 (accessed Mar. 30, 2021).

[4] T. J. Post, "BREAKING: Jokowi announces Indonesia's first two confirmed COVID-19 cases," *The Jakarta Post*. https://www.thejakartapost.com/news/2020/03/02/breaking-jokowi-announces-indonesias-first-two-confirmed-covid-19-cases.html (accessed Mar. 30, 2021).

[5] "Coronavirus Update (Live): 128,309,998 Cases and 2,805,941 Deaths from COVID-19 Virus Pandemic - Worldometer." https://www.worldometers.info/coronavirus/#countries (accessed Mar. 30, 2021).

[6] M. Lotfi, M. R. Hamblin, and N. Rezaei, "COVID-19: Transmission, prevention, and potential therapeutic opportunities," *Clin. Chim. Acta*, vol. 508, pp. 254–266, Sep. 2020, doi: 10.1016/j.cca.2020.05.044.

[7] "Aerodynamic Characteristics and RNA Concentration of SARS-CoV-2 Aerosol in Wuhan Hospitals during COVID-19 Outbreak | bioRxiv." https://www.biorxiv.org/content/10.1101/2020.03.08.982637v1 (accessed Mar. 30, 2021).

[8] N. van Doremalen *et al.*, "Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1," *N. Engl. J. Med.*, vol. 382, no. 16, pp. 1564–1567, Apr. 2020, doi: 10.1056/NEJMc2004973.

[9] L. Morawska *et al.*, "How can airborne transmission of COVID-19 indoors be minimised?," *Environ. Int.*, vol. 142, p. 105832, Sep. 2020, doi: 10.1016/j.envint.2020.105832.

[10] S.-A. Tabatabaeizadeh, "Airborne transmission of COVID-19 and the role of face mask to prevent it: a systematic review and meta-analysis," *Eur. J. Med. Res.*, vol. 26, no. 1, p. 1, Jan. 2021, doi: 10.1186/s40001-020-00475-6.

[11] V. Senatore *et al.*, "Indoor versus outdoor transmission of SARS-COV-2: environmental factors in virus spread and underestimated sources of risk," *Euro-Mediterr. J. Environ. Integr.*, vol. 6, no. 1, p. 30, Feb. 2021, doi: 10.1007/s41207-021-00243-w.

[12] L. Dietz, P. F. Horve, D. A. Coil, M. Fretz, J. A. Eisen, and K. V. D. Wymelenberg, "2019 Novel Coronavirus (COVID-19) Pandemic: Built Environment Considerations To Reduce Transmission," *mSystems*, vol. 5, no. 2, Apr. 2020, doi: 10.1128/mSystems.00245-20.

[13] "WHO | Natural ventilation for infection control in health-care settings," *WHO*. http://www.who.int/water_sanitation_health/publications/natural_ventilation/en/ (accessed Mar. 31, 2021).

[14] P. Michael, "Health Building Note 00-01: General design guidance for healthcare buildings," *UK Gov.*, p. 77.

[15] J. T. da Silva and M. L. G. da R. Oiticica, "Influence of the Openings Size on Acoustic Quality of Naturally Ventilated Classrooms," 2015. /paper/Influence-of-the-Openings-Size-on-Acoustic-Quality-Silva-Oiticica/f5c6f8c975e9f43f74f9fedfe01b7d1aeda54961 (accessed Mar. 31, 2021).

[16] J. Harvie-Clark, N. Conlan, W. Wei, and M. Siddall, "How loud is too loud? noise from domestic mechanical ventilation systems," *Int. J. Vent.*, vol. 18, no. 4, pp. 303–312, Oct. 2019, doi: 10.1080/14733315.2019.1615217.
[17] K. Maishan and Asst. Prof. Dr. H. Z. Alibaba, "Auditorium Acoustics From Past to Present," *Int. J. Eng. Res. Appl.*, vol. 07, no. 01, pp. 15–23, Jan. 2017, doi: 10.9790/9622-0701011523.
[18] A. M. Jaramillo, "Architectural Acoustics: From Auditoria to Zoos," *J. Acoust. Soc. Am.*, vol. 146, no. 4, pp. 2871–2871, Oct. 2019, doi: 10.1121/1.5136962.
[19] D. Çolakkadıoğlu, M. Yücel, B. Kahveci, and Ö. Aydınol, "Determination of noise pollution on university campuses: a case study at Çukurova University campus in Turkey," *Environ. Monit. Assess.*, vol. 190, no. 4, p. 203, Mar. 2018, doi: 10.1007/s10661-018-6568-8.
[20] S. S. Utami, D. D. Avoressi, K. Zakiya, and H. Sutanta, "SOUND LEVEL MAPPING USING GEOGRAPHIC INFORMATION SYSTEM (GIS) TO OPTIMIZE A GREEN CAMPUS ENVIRONMENT QUALITY," vol. 11, no. 6, p. 7, 2016.
[21] R. M. Hasan, S. S. Utami, and H. Sutanta, "Outdoor traffic noise effect in indoor sound distribution," *J. Phys. Conf. Ser.*, vol. 1075, p. 012061, Aug. 2018, doi: 10.1088/1742-6596/1075/1/012061.
[22] M. Long, *Architectural acoustics*. Amsterdam; Boston: Elsevier/Academic Press, 2006. Accessed: Feb. 07, 2021. [Online]. Available: http://site.ebrary.com/id/10190366
[23] E. Sala and L. Rantala, "Acoustics and activity noise in school classrooms in Finland," *Appl. Acoust.*, vol. 114, pp. 252–259, Dec. 2016, doi: 10.1016/j.apacoust.2016.08.009.
[24] J. F. Culling, R. Gocheva, Y. Li, and N. Kamaludin, "The effects of ceiling height and absorber placement on speech intelligibility in simulated restaurants," *Acoust. Sci. Technol.*, vol. 41, no. 1, pp. 223–228, 2020, doi: 10.1250/ast.41.223.
[25] J. Y. Jeon, R. Seo, and H. I. Jo, "Effect of Stage Volume Ratio on Audience Acoustics in Concert Halls," *Sustainability*, vol. 12, no. 4, pp. 1–19, 2020.
[26] C. H. Haan and F. R. Fricke, "Statistical investigation of geometrical parameters for the acoustic design of auditoria," *Appl. Acoust.*, vol. 35, no. 2, pp. 105–127, Jan. 1992, doi: 10.1016/0003-682X(92)90026-O.
[27] British Standard, "Code of Practice for Places of Assembly, Fire Precautions in the Design, Construction, and Use of Buildings, BS 5588, Part 6." 1991.
[28] L. Beranek, "Concert hall acoustics," *Archit. Sci. Rev.*, vol. 54, no. 1, pp. 5–14, Feb. 2011, doi: 10.3763/asre.2010.0059.
[29] L. Beranek, "Acoustics of concert halls," 1979, vol. 4, pp. 251–259.
[30] L. Beranek, *Concert Halls and Opera Houses: Music, Acoustics, and Architecture*, 2nd ed. New York: Springer-Verlag, 2004. doi: 10.1007/978-0-387-21636-2.
[31] R. E. Apfel and D. R. Raichel, "Deaf Architects & Blind Acousticians? - A Guide to the Principles of Sound Design," *J. Acoust. Soc. Am.*, vol. 104, no. 2, pp. 613–613, Aug. 1998, doi: 10.1121/1.423371.
[32] A. K. Klosak and A. C. Gade, "Relationship between room shape and acoustics of rectangular concert halls," *J. Acoust. Soc. Am.*, vol. 123, no. 5, pp. 3199–3199, May 2008, doi: 10.1121/1.2933354.
[33] S. Lu, X. Yan, J. Li, and W. Xu, "The Influence of Shape Design on the Acoustic Performance of Concert Halls from the Viewpoint of Acoustic Potential of Shapes," *Acta Acust. United Acust.*, vol. 102, no. 6, pp. 1027–1044, Nov. 2016, doi: 10.3813/AAA.919017.

[34] M. Barron, "The Search for Excellence in Auditorium Acoustics," *Acoust. Aust.*, vol. 43, no. 1, pp. 25–31, Apr. 2015, doi: 10.1007/s40857-015-0012-9.
[35] Y. Jurkiewicz, T. Wulfrank, and E. Kahle, "Architectural shape and early acoustic efficiency in concert halls (L)," *J. Acoust. Soc. Am.*, vol. 132, no. 3, pp. 1253–1256, Sep. 2012, doi: 10.1121/1.4740493.
[36] M. Cairoli, "The architectural acoustic design for a multipurpose auditorium: Le Serre hall in the Villa Erba Convention Center," *Appl. Acoust. Acoust. Appl. Angew. Akust.*, vol. 173, p. 107695, Feb. 2021, doi: 10.1016/j.apacoust.2020.107695.
[37] C. Sun and Z. Zhai, "The efficacy of social distance and ventilation effectiveness in preventing COVID-19 transmission," *Sustain. Cities Soc.*, vol. 62, p. 102390, Nov. 2020, doi: 10.1016/j.scs.2020.102390.
[38] G. M. Abbas and I. G. Dino, "The impact of natural ventilation on airborne biocontaminants: a study on COVID-19 dispersion in an open office," *Eng. Constr. Archit. Manag.*, Apr. 2021, doi: 10.1108/ECAM-12-2020-1047.
[39] S. Park, Y. Choi, D. Song, and E. K. Kim, "Natural ventilation strategy and related issues to prevent coronavirus disease 2019 (COVID-19) airborne transmission in a school building," *Sci. Total Environ.*, vol. 789, p. 147764, Oct. 2021, doi: 10.1016/j.scitotenv.2021.147764.
[40] C. Ren, S.-J. Cao, and F. Haghighat, "A practical approach for preventing dispersion of infection disease in naturally ventilated room," *J. Build. Eng.*, vol. 48, p. 103921, May 2022, doi: 10.1016/j.jobe.2021.103921.
[41] L. L. Doelle, *Environmental Acoustics*. McGraw-Hill, 1972.
[42] M. Barron, *Auditorium Acoustics and Architectural Design*. Routledge, 2009.
[43] F. A. Everest and K. C. Pohlmann, *Master handbook of acoustics*, 5th ed. New York: McGraw-Hill, 2009.
[44] Acentech and J. P. Cowan, *Architectural Acoustics Design Guide*, 1st edition. New York: McGraw-Hill Professional, 2000.
[45] T. J. Cox and P. D'Antonio, *Acoustic Absorbers and Diffusers: Theory, Design and Application*. CRC Press, 2004.
[46] A. P. O. Carvalho, "Relations between rapid speech transmission index (RASTI) and other acoustical and architectural measures in churches," *Appl. Acoust.*, vol. 58, no. 1, pp. 33–49, Sep. 1999, doi: 10.1016/S0003-682X(98)00071-1.
[47] ISO 3382-1, "Acoustics — Measurement of room acoustic parameters — Part 1: Performance spaces." International Standard.
[48] A. C. Gade, "Acoustics in Halls for Speech and Music," in *Springer Handbook of Acoustics*, 2522nd–8706th ed., vol. 1, New York: Springer, 2007, pp. 301–350. [Online]. Available: https://link.springer.com/referenceworkentry/10.1007%2F978-0-387-30425-0_9
[49] H. Kuttruff, *Room acoustics*, 5th ed. London & New York: Spon Press/Taylor & Francis, 2009.
[50] J. S. Bradley, R. Reich, and S. G. Norcross, "A just noticeable difference in C50 for speech," *Appl. Acoust.*, vol. 58, no. 2, pp. 99–108, Oct. 1999, doi: 10.1016/S0003-682X(98)00075-9.
[51] Y. Nagatani, T. Sakaguchi, and H. Hosoi, "Evaluation of acoustic environments using deteriorated speech sound," *J. Acoust. Soc. Am.*, vol. 123, no. 5, pp. 3176–3176, May 2008, doi: 10.1121/1.2933263.
[52] C. E. Mediastika, *Material akustik pengendali kualitas bunyi pada bangunan*. Yogyakarta: Andi Offset, 2009.
[53] M. D. Egan, *Architectural Acoustic*. New York: J. Ross Publishing, 1976.
[54] L. E. Kinsler, Ed., *Fundamentals of acoustics*, 4th ed. New York: Wiley, 2000.

[55] C. E. Mediastika, *Akustika Bangunan: Prinsip-prinsip dan penerapannya di Indonesia*. Yogyakarta: Erlangga, 2005. Accessed: Jan. 26, 2022. [Online]. Available: https://scholar.google.co.id/citations?view_op=view_citation&hl=en&user=PRUg0R4AAAAJ&citation_for_view=PRUg0R4AAAAJ:u5HHmVD_uO8C

[56] "Industrial noise control : fundamentals and applications (eBook, 1994) [WorldCat.org]." https://www.worldcat.org/title/industrial-noise-control-fundamentals-and-applications/oclc/47008503 (accessed Jan. 26, 2022).

[57] American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), "ANSI/ASHRAE Standard 62.1-2019: Ventilation for Acceptable Indoor Air Quality." ASHRAE, 2019.

[58] "Roadmap to improve and ensure good indoor ventilation in the context of COVID-19." WHO, 2021. Accessed: Feb. 05, 2022. [Online]. Available: https://www.who.int/publications-detail-redirect/9789240021280

[59] H. Smith, "Geometric Acoustic Modeling of the LDS Conference Center," *Theses Diss.*, Nov. 2004, [Online]. Available: https://scholarsarchive.byu.edu/etd/196

[60] "INSUL: Predict transmission loss, impact sound, and rain noise." http://www.insul.co.nz/features/ (accessed Apr. 08, 2021).

[61] *CFD: MicroFlo User Guide*. IES<VE>, 2015. [Online]. Available: www.iesve.com

[62] "CLOUDLINE S8, Quiet Inline Duct Fan System with Speed Controller, 8-Inch - AC Infinity." https://www.acinfinity.com/hvac-home-ventilation/inline-duct-fan-systems/cloudline-s8-quiet-inline-duct-fan-system-with-speed-controller-8-inch/ (accessed Feb. 21, 2022).

[63] C. Tarau, V. Sheverev, V. Otugen, and G. Vradis, "Temperature Gradient Effects on Sound Wave Propagation," presented at the 42nd AIAA Aerospace Sciences Meeting and Exhibit, Reno, Nevada, Jan. 2004. doi: 10.2514/6.2004-366.

[64] E. Murphy and E. A. King, "Noise Mitigation Approaches," in *Environmental Noise Pollution*, Elsevier, 2014, pp. 203–245. doi: 10.1016/B978-0-12-411595-8.00007-0.

[65] T. Protchenko, "Prototype of Hempcrete noise barrier wall," 2019. http://www.theseus.fi/handle/10024/170955 (accessed Jan. 26, 2022).

[66] K. Madu, "Adaptation of an Air-Conditioning System for Use in a 100-Seater Capacity Auditorium, in Nigeria," Social Science Research Network, Rochester, NY, SSRN Scholarly Paper ID 3179762, May 2018. Accessed: Dec. 25, 2021. [Online]. Available: https://papers.ssrn.com/abstract=3179762

[67] D. Koenig, "Coronavirus on Fabric: What You Should Know," *WebMD*. https://www.webmd.com/lung/news/20200401/coronavirus-on-fabric-what-you-should-know (accessed Mar. 08, 2022).

[68] B. A. S and B. A. S, "PENGARUH ELEMEN RUANG TERHADAP KUALITAS AKUSTIK AUDITORIUM Studi Kasus: Auditorium Multifungsi Grha Sabha Pramana Universitas Gadjah Mada," Universitas Gadjah Mada, 2016. Accessed: Jan. 25, 2022. [Online]. Available: http://etd.repository.ugm.ac.id/penelitian/detail/106534

Lampiran: Histori alur persetujuan

No	Jabatan	Nama	Jenis	Tanggal Disetujui
1	Ketua Program Studi Magister Teknik Fisika	Dr. Gea Oswah Fatah Parikesit, S.T., M.Sc.	Paraf	Selasa, 29 Maret 2022 16:57
2	Ketua Departemen Teknik Nuklir dan Teknik Fisika	Dr. Ir. Alexander Agung, S.T., M.Sc.	Tanda Tangan	Selasa, 29 Maret 2022 19:00

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