References

- J. R. Herring, "Economic Liberalization Policies in Sri Lanka: International Pressures, Constraints and Supports," *Economic and Political Week*, vol. 22, no. 8, pp. 325-333, Feb 1987.
- [2] K. Rajendran, J. Ling-Chin, P. A. Roskilly, "Thermal Energy Efficiency in Industrial Processes," *Handbook of Clean Energy Systems*, Newcastle upon Tyne, John Wiley & Sons Ltd, 2015, pp. 50-62.
- [3] Sri Lanka Sustainable Energy Authority, "Sri Lanka Energy Balance 2019," Sri Lanka Sustainable Energy Authority, Colombo, 2019.
- P. V. Bockh, T. Wetzel, "Heat Transfer Basics and Practice," in *Thermal conduction* in static materials, London, New York, Springer Heidelberg Dordrecht, 2012, pp. 17-74.
- [5] U.S. Manufacturing & Mining, "Energy Use Loss and Opportunities Analysis," *Energy Efficiency and Renewable Energy in industrial technologies*, pp. 12-27, December 2004.
- [6] K. Wang, Z. Qin, W. Tong, J.I. Shenzhen, "Thermal Energy Storage for Solar Energy Utilization: Fundamentals and Applications," *Renewable Energy -Resources, Challenges and Applications*, pp. 15-37, September 2020.
- [7] J. Ling-Chin, H. Bao, Z. Ma, W. Taylor, A. P. Roskilly, "State-of-the-Art Technologies on Low-Grade Heat Recovery and Utilization in Industry," *Energy Conversion - Current Technologies and Future Trends*, vol. 04, no. 2, pp. 25-33, 2018.

- [8] R.Q. Wang, L. Jiang, Y.D. Wang, A.P. Roskilly, "Energy saving technologies and mass-thermal network optimization for decarbonized iron and steel industry," *Journal of Cleaner Production*, vol.274, July 2020.
- C. D. Montgomery, "Introduction to Factorial Designs," *Design and Analysis of Experiments*, 8th Edition, Hoboken, New Jersey, John Wiley & Sons, 2013, pp. 183-320.
- [10] V. Alvarez, M. Paulis, "Effect of acrylic binder type and calcium carbonate filler amount on the properties of paint-like blends," *Progress in Organic Coatings*, vol. 112, pp. 210-218, July 2017.
- [11] P. Worsfold, A. Townshend, C. P. Paulis, "PAINTS | Organic Solvent-Based," Encyclopedia of Analytical Science, pp. 9–18, 2017.
- [12] B.W. McMinn, P.J. M. Alliance, "Control of VOC emissions from ink and paint manufacturing processes," *Control Technology Center U.S. Environmental Protection Agency*, vol. 92, no. 2, April 1992.
- [13] Y.E. Xiufang, C.H.E.N. Dongchu, C.H.A.N.G. Menglei, M.O. Youtian, W.A.N.G. Qingxiang, "Preparation of a Novel Water-based Acrylic Multi-Thermal Insulation Coating," Materials Science (Medžiagotyra), vol. 23, no. 2, pp. 173-180, 2017.
- [14] J.C. Tan, S.A. Tsipas, I.O. Golosnoy, J.A. Curran, S. Paul, T.W. Clyne, "A steadystate Bi-substrate technique for measurement of the thermal conductivity of ceramic coatings," *Surface & Coatings Technology*, vol. 201, pp. 1414-1420, March 2006.
- [15] A. Boucher, "Steady-state theoretical model of fired clay hollow bricks for enhanced external wall thermal insulation. Building and Environment," *Thermochimica Acta*, vol. 662, pp. 100-107, 2018.

- [16] A. Ynnefa, M. Santamouris, I.A. Livada, "Study of the thermal performance of reflective coatings for the urban environment," *Solar Energy*, vol. 80, no. 8, pp. 968-981, 2006.
- [17] Z. Wang, "A facial one-pot route synthesis and characterization of Y-stabilized Sb₂O₃ solar reflective thermal insulating coatings," *Materials Chemistry and Physics*, vol. 130, no. 1, pp. 466-470, 2011.
- [18] X.Q. Cao, R. Vassen, D. Stoever, "Ceramic materials for thermal barrier coatings," *Journal of the European Ceramic Society*, vol. 24, no. 1, pp 1-10, 2004.
- [19] J. Andrzej, Panasa, W. Stryczniewiczb, R. Szczepaniakc, "Investigation of thermophysical properties of thin-layered paint," *Thermochimica Acta*, vol. 662 pp. 100–107, 2018.
- [20] G. Rotstein, N. Shah, E. Sorensen, S. Macchietto, "Analysis and Design of Paint Manufacturing Processes," *Chemical Engineering*, vol. 22, pp. 279-282, 1998.
- [21] A. R. Magdy, A. Youssef, "Paint industry raw materials & Unit Operations & Equipment & Manufacturing & Quality Tests," *Environment and Society*, vol.02, pp. 198-207, 2020.
- [22] A. Brandau, "Introduction to Coatings Technology," Federation Series on Coatings Technology, vol. 04, no. 2, pp. 25-33, 2016.
- [23] P. Pandey, U.V. Kiran, "Solvent-based paint and its impact on the environment and human beings," *Environment and society*, pp: 198-207, October 2020.
- [24] B.W. McMinn, P.J. Marsosudiro, "Control of VOC emissions from ink and paint manufacturing processes," *Control technology*, vol. 62, no. 02, pp 68-92, April 1992.

- [25] Y. Xiufang, C.H.E.N. Dongchu, "Thermal Insulation Coatings in Energy Saving," *Thermal energy saving*, pp 28-45, 2018.
- [26] Z. Shu, J. Zhou, Y. Wang, "A novel approach of preparing press-powders for cleaner production of ceramic tiles," *Journal of Cleaner Production*, vol. 18, pp. 1045–1051, February 2010.
- [27] L. S. Bozadzhiev, R. L. Bozadzhiev, "Single fired floor tile bodies containing feldspar and perlite," *National and world economics*, pp. 245-252, 2002.
- [28] B. H. Ahmeda, M. A. Ramadana, A. M. Nourb, S. S. Abd El Malakc, A. El Aziz, Z. Gomaad, "Innovative precursor for manufacturing of superior enhancer of intumescence for paint: Thermal insulative coating for steel structures," *Progress* in Organic Coatings, vol.118, pp. 129–140, January 2018.
- [29] M. Barlettaa, S. Guarinoa, G. Rubinob, F. Trovaluscic, V. Tagliaferria, "Environmentally friendly wooden-based coatings for thermal insulation: Design, manufacturing and performances," *Progress in Organic Coatings*, pp. 32-66, October 2014.
- [30] Y.E. Xiufang, C.H.E.N. Dongchu, C.H.A.N.G. Menglei, M.O. Youtian, W.A.N.G. Qingxiang, "Preparation of a Novel Water-based Acrylic Multi-Thermal Insulation Coating," *Materials Science and Energy Engineering*, vol. 23, no. 2, pp.173-180, 2017.
- [31] T. Mariappan, A. Agarwal, S. Ray, "Influence of titanium dioxide on the thermal insulation of water-borne intumescent fire protective paints to structural steel," *Progress in Organic Coatings*, vol. 111, pp. 67–74, April 2017.
- [32] Y. Chen, J, Wang, S. Wen, C. Wang, Z. Zhao, L.I. Weiping, "Zinc phosphate coated modified hollow glass beads and their thermal insulation and anticorrosion performance in coatings," *Ceramics International*, vol. 21, pp. 272-290, May 2021.

- [33] BASF East Asia Regional Headquarters. "Practical Guide to Dispersing Agents," *Formulation of additives by BASF*, 2016.
- [34] T. H. Nguyen, N. Tam Mai, V. R. M. Reddy, J. H. Jung, N. Tam, N. Truong,
 "Synthesis of silica aerogel particles and its application to thermal insulation paint,"
 vol. 37, no. (10), pp. 1803-1809, May 2020.
- [35] A. Simpson, R. Fitton, I.G. Rattigan, A. Marshall, G. Parr, W. Swan, "Thermal performance of thermal paint and surface coatings in buildings in heating dominated climates," *Energy & Buildings*, vol. 197, pp. 196–213, April 2019.
- [36] P. Worsfold, A. Townshend, C. Poole, "Paint Organic Solvent Based," Encyclopedia of Analytical Science, vol.10, pp. 9-18, 2005.
- [37] S. Malz, W. Krenkel, O. Steffens, "Infrared Reflective Wall Paint in Buildings: Energy Saving Potentials and Thermal Comfort," *Energy & Buildings*, pp. 1-17, June 2020.
- [38] C.R. Kothari, "Research methodology method and techniques 2nd edition," in *Research Methodology - An Introduction*, New Delhi, New age international publishers, May 1990, pp. 14-126.
- [39] N. Mack, C. Woodsong, K. Macqueen, G. Guest, E. Namey, "Qualitative Research Method," in *A data collector's field guide,*" North Carolina, Family health international, 2005, pp. 16-70.
- [40] K. R. Yin, "Qualitative Research from Start to Finish," Understanding qualitative research, New York, London, The guilford press, 2011, pp. 03-75.
- [41] D. Bozsaky, "Laboratory tests with liquid nano-ceramic thermal insulation coating," *Creative Construction Conference*, vol. 123, pp. 68 – 75, October 2015.

- [42] C. Jianga, J. Zhua, Q. Songa, J. Hua, "Controlled TiO₂ coating on hollow glass microspheres and their reflective thermal insulation properties," *Creative Construction Conference*, vol. 123, pp. 68-75, March 2019.
- [43] Y. Baoa, R. Guoa, Q. L. Kang, C. Liu, W. Zhang, Q. Zhu "Transparent, thermal insulation and UV-shielding coating for energy efficient glass window", *Ceramics International*, May 2021.
- [44] L. E. Reynoso, A. B. C. Romero, G. M. Viegas, G. Alberto, S. Juan, "Characterization of an alternative thermal insulation material using recycled expanded polystyrene" *Construction and Building Materials*, vol. 301, June 2021.
- [45] G. C. Tatlisuac, C. Aciksariab, S. Celebi, S. Turanac, "Developing a hollow glass microsphere/geo polymer thermal insulation composite for hot metal surface coating," *Ceramics International Construction and Building Materials*, vol. 301, January 2022,
- [46] Q. Tang, Y. Zhang, P. Zhang, J. Shi, W. Tian, Z. Sun, "Preparation and properties of thermal insulation coatings with a sodium stearate-modified shell powder as a filler," *International Journal of Minerals, Metallurgy and Materials*, vol. 24, no. 10, pp. 11-92, October 2017.
- [47] H.M. F. Shakir, A. Ali, U. Zubair, T. Zhao, Z.A. Rehan, I. Shahid, "Fabrication of low emissivity paint for thermal/NIR radiation insulation for domestic applications," *Energy Reports*, vol.8, pp. 7814–7824, May 2022.
- [48] F. Zhou, Y. Wang, M. Liu, C. Deng, X. Zhang, "Thermo-physical and thermal insulation properties of multi-scale nanostructured thermal barrier coatings using as-prepared feed stocks," *Ceramics International*, vol. 19, no. 4, pp. 272-842, August 2019.
- [49] I. Panchenko1, M. Akulova, D. Panchenko, "Thermal insulation coating based on water-based polymer dispersion," *MATEC web of Conferences*, vol. 143, 2018.

- [50] T. Zhang, Y. Wang, J. Tang, Q. Tang, M. Zhang, L. Shen, W. Tian, Y. Zhang, Z. Sun, "Shell powder as a novel bio-filler for thermal insulation coatings," vol. 18, no. 2, pp. 1016-1045, February 2019.
- [51] Sri Lanka energy balance. (2019). *Analysis of energy sector performance* [Online]. https://www.energy.gov.l/images/energy-balance/energy-balance-2019-lq.pdf.
- [52] Energy use, loss and opportunities. (December 2014). U.S. Manufacturing & Mining.[Online].Available; <u>https://www1.eere.energy.gov/manufacturing/intensiveprocesses/pdf</u>.
- [53] PRISMA guideline. (2020). *Prisma flow diagram*. [Online] Available: https://libguides.derby.ac.uk/ld.php?content_id=34356887.
- [54] Thermal insulation coating in energy saving. (December 2018). Energy efficiency approaches [Online]. Available: <u>https://www.intechopen.com/chapters/63517</u>.
- [55] Coating materials. (2012). *Paints and Coatings Resource Center* [Online] Available:https://opentextbc.ca/principlesofaccountingv2openstax/chapter/compar
- [56] WFT Gauge. ZEHNTNER 25 to 2000 gauges [Online]. Available: <u>https://www.indiamart.com/proddetail/wet-film-thickness-gauges13068324697</u>. html.
- [57] DFT gauge. *TQC Defelsko coating thickness gauge 6000* [Online]. Available: https://coating-supplies.com.au/product/cstld6057-defelsko-coating.
- [58] Vinyl acetate polymerization. (2022). Polymer Science Learning Center [Online]. Available; <u>https://pslc.ws/macrog/pva.htm</u>.
- [59] Sodium Polyaxrylates, NaPA. [Online]. Available: <u>https://www.researchgate.net/figure/Sodium-Polyacrylate-chemical.</u>

[60] D. R. Clarke, M. Oechsner, N. P. Padture, "Thermal-barrier coatings for more efficient gas-turbine engines," *Surface & Coatings Technology*, vol. 37, pp. 891-898, 2012.