Shauhrat S. Chopra

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Brief Bio:

I, Dr. Shauhrat S. Chopra, am an Associate Professor at the School of Energy and Environment, City University of Hong Kong (CityU). I received my PhD in Civil and Environmental Engineering from the Swanson School of Engineering at the University of Pittsburgh, USA, in 2015. My doctoral dissertation focused on resilience of complex systems, including economic systems, industrial symbiosis, and critical infrastructure systems at urban and national levels. Before joining the School of Energy and Environment, I worked as a Postdoctoral Researcher at the Institute for Environmental Science and Policy, University of Illinois at Chicago, on the U.S. EPA-funded LCnano project focused on sustainable design of future transformative nano-enabled products. Since joining the School of Energy and Environment (SEE) at City University of Hong Kong (CityU) as an Assistant Professor of Sustainability Engineering in January 2018, my data-driven research has been focused on designing indicators for sustainability and resilience of the built environment in support of environmental decision-making. I was promoted to the rank of Associate Professor in 2024.

I have established himself as a global leader in urban sustainability and resilience research, tackling the complexities of trade-offs and synergies between climate change adaptation and mitigation within Hong Kong's built environment. Ranked within the top 2% of scientists globally by Stanford University. As of July 2024, 70 out of 76 of Prof. Chopra's papers have been tagged under Sustainable Development Goals (SDGs) in Scopus, placing his contributions among the top 1% of researchers at CityU. These works are not only impactful but also widely recognized for advancing the global SDGs agenda.

Education

PhD in Civil and Environmental Engineering — **August 2011- July 2015**
Swanson School of Engineering, University of Pittsburgh — Pittsburgh, PA

Bachelor + Masters in Systems Biology — **August 2006 – May 2011**
University of Hyderabad, *First class with distinction* — Hyderabad, India

Professional Experience

City University of Hong Kong, Associate Professor — **July 2024 - Present**
School of Energy and Environment — Hong Kong

City University of Hong Kong, Assistant Professor — **January 2018 – July 2024**
School of Energy and Environment — Hong Kong

University of Illinois at Chicago (UIC), Postdoctoral Researcher. — **August 2015 – November 2017**
Advisor: Prof. T Theis, Institute of Environmental Science and Policy — Chicago, IL

- Sustainable Design of Emerging Technologies- Nano-enabled Products

University of Pittsburgh, Graduate Student Researcher — **August 2011- May 2015**
Advisor: Prof. V Khanna, Civil and Environmental Engineering — Pittsburgh, PA

- Resilience of Complex Systems: Industrial Symbiosis, Transportation Infrastructure, Critical Infrastructure systems

Awards/Recognition

- As detailed in the attached Excel sheet, by July 2024, **70 out of 76 papers (92%) from Prof. Chopra's research group have been tagged with Sustainable Development Goals (SDGs) in Scopus**, reflecting their dedication to advancing global sustainability.
- Recognized as being **among the top 2% of the world's most highly cited scientists globally by Stanford University**, an acknowledgment that highlights the exceptional impact and influence of Dr. Chopra's research on the global scientific community.
- **Nature Communications announced that research paper**, "Interconnectedness enhances network resilience of multimodal public transportation systems for Safe-to-Fail urban mobility", has been **featured on their Editors' Highlights webpage** under the "Engineering and Infrastructure" section.
- UG Final Year Project by LO Chuen Hei Samuel, was shortlisted for the SEE Final Year Project Awards and the Vtech Innovation and Sustainability award. Eventually, he was awarded the **Second Runner-up in the "2022 Vtech Innovation and Sustainability Award"**
- Research paper titled, "Sustainability-inspired upcycling of waste polyethylene terephthalate plastic into porous carbon for CO2 capture" was **featured on the cover of Issue 4, 2022 of the Green Chemistry** journal. DOI: https://doi.org/10.1039/D2GC90013K
- **Nominated for Best paper 2021 in Journal of Industrial Ecology** by the research community, but was not eventually awarded the prize.
- Ching Man Kit received the **Second Runner-up Award for the "2021 Outstanding Final Year Project"** and the **First Runner-up Award for the "2021 VTech Innovation and Sustainability Award"**
- Research paper titled, " Biotechnology of Plastic Waste Degradation, Recycling, and Valorization: Current Advances and Future Perspectives" was **among the top 10 most downloaded papers published in ChemSusChem journal in 2021**
- Research paper titled, "Environmental life cycle assessment of textile bio-recycling – valorizing cotton-polyester mixed textile waste to pet fiber and glucose syrup" published in the Resources Conservation and Recycling journal was **picked up by the BBC future** (https://www.altmetric.com/details/85678016)
- Paper titled, "Hybrid Renewable Energy Microgrid for a Residential Community: A Techno-Economic and Environmental Perspective in the Context of the SDG7" published in Sustainability was selected to be **featured on the website front page** (https://www.mdpi.com/journal/sustainability) as one of the three main banner images in 2020
- PhD. Student awarded **Most Active Participant** at the 2020 Actionable Science for Urban Sustainability (AScUS) Unconference
- PhD. Student awarded **Best Presentation** at the 8th World Conference on Applied Sciences, Engineering, and Management-2020, Kyushu University, Japan.
- PhD. Student awarded **Best Poster for the Life Cycle Sustainability Assessment** section in 2019 at the 10th International Conference of the International Society for Industrial Ecology at Tsinghua University, Beijing, China
- PhD. Student granted **Outstanding Academic Performance Award** in 2019 by Chow Yei Ching School of Graduate Studies, City University of Hong Kong.
- PhD. Student granted **Research Tuition Scholarship** in 2019 from Chow Yei Ching School of Graduate Studies, City University of Hong Kong.
- **Awarded 2015 Environmental Science & Technology Best Paper** Runner-Up in Environmental Policy
- Recognized as **International Symposium for Sustainable Systems and Technology 2016 Scholar**

Citations in Policy Documents

This section highlights the impact of my research and its application in policy-making. My publications have been cited in official policy documents (based on *Overton database*) as follows:

- **Research and innovation in transport safety and resilience in Europe - Publications Office of the EU** (Publications Office of the European Union, September 27, 2023). Cites Xu and Chopra (2023) on the need for multimodal integration and modal shift to understand urban mobility resilience.

- **World Public Sector Report 2023 : transforming institutions to achieve the Sustainable Development Goals after the pandemic / United Nations Department of Economic and Social Affairs** (United Nations, January 1, 2023). Cites Rajvikram Madurai Elavarasan et al. (2022) on the interdependencies of SDG during post-pandemic recovery.
- **OECD Regional Outlook 2021: Addressing COVID-19 and moving to net zero greenhouse gas emissions** (OECD, May 5, 2021). Cites Ahl, A. et al. (2020) on strategies for addressing the COVID-19 pandemic and the transition towards a climate-neutral economy.
- **The 5 Cs of Agrivoltaic Success Factors in the United States: Lessons from the InSPIRE Research Study** (National Renewable Energy Laboratory, USA, August 16, 2022). Cites Gorjian, S., et al. (2022) on potential of agrivoltaics to mitigate conflicts between solar and agricultural activities.
- **Study on the Technical, Regulatory, Economic and Environmental Effectiveness of Textile Fibres Recycling** (Ecologic Institute,Germany, December 16, 2021). Cites Subramanian, K., et al. (2020) on enhancing textile recycling in the EU.
- **Ready for the Next Crisis? Investing in Health System Resilience** (OECD, February 23, 2023). Cites Chopra, S. S., and Khanna, V. (2015) on the need for health systems to be more resilient in the face of shocks.
- **Mobility and Resilience: A Global Assessment of Flood Impacts on Road Transportation Networks** (World Bank, May 18, 2022). Cites Chopra, S. S., et al. (2016) on flood hazard impacts on road transportation networks.
- **The Implications of India's Revised Roadmap for Biofuels: A Lifecycle Perspective** (Observer Research Foundation, India, March 7, 2022). Cites Zaimes, G. G., et al. (2015) on the conversion of biomass into liquid fuels.
- **Kunskapsöversikt säkra flöden, försörjningssäkerhet och kritiska beroenden: studie (Knowledge overview safe flows, security of supply and critical dependencies: study)** (Swedish Civil Contingencies Agency, June 21, 2017). Cites Chopra, S. S., and Khanna, V. (2015) on the security of supply and critical dependencies.
- **Scoping study to identify potential circular economy actions, priority sectors, material flows and value chains: final report** (Publications Office of the European Union, September 18, 2014). Cites Chopra, S. S., and Khanna, V. (2014) on actions, sectors, flows, and chains of the circular economy.
- **Priorities and policy options to support the circular economy** (Institute for European Environmental Policy, September 17, 2014). Cites Chopra, S. S., and Khanna, V. (2014) on supporting the circular economy.

Publications (click here for the updated profile)

Total no. of SCI/SSCI papers: 78; Scopus h-index: 32; Citations: 2,777

Corresponding author*, PhD students[a], UG and MSc students[b], RAs and Postdocs[c] under supervision

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1. Farid, M.U., Kharraz, J.A., Sharma, S., Khan, R.J., Khanzada, N.K., Deka, B.J., Nallapaneni[c], M.K., **Chopra, S.S.**, Leu, S.Y., Hasan, S.W. and Hilal, N., 2023. Technological advancements in water heating approaches for membrane distillation desalination process: From bulk to localized heating. **Desalination**, p.117235.
2. Miao, Yahui[a], Ming Ho To, Muhammad Ahmar Siddiqui, Huaimin Wang, Sofie Lodens, **Shauhrat S. Chopra**, Guneet Kaur, Sophie LKW Roelants, and Carol Sze Ki Lin. "Sustainable biosurfactant production from secondary feedstock—recent advances, process optimization and perspectives**." Frontiers in Chemistry** 12 (2024).
3. Biswas, Mithun Kumar, Abul Kalam Azad, Anupa Datta, Shuvasish Dutta, Shimul Roy[c], and **Shauhrat S. Chopra***. "Navigating Sustainability through Greenhouse Gas Emission Inventory: ESG Practices and Energy Shift in Bangladesh's Textile and Readymade Garment Industries." **Environmental Pollution** 345 (2024): 123392.
4. Lin, Wenzhu, Xiaoxue Yao, Nallapaneni Manoj Kumar[c], Wai Kin Lo, **Shauhrat S. Chopra**, Ng Yun Hau, and Steven Wang. "Camel-Fur-Inspired Graphite-Based Hygroscopic Membrane for Passive Air Cooling with

Ultrahigh Cooling Power (Adv. Energy Mater. 16/2024)." **Advanced Energy Materials** 14, no. 16 (2024): 2470069.

5. Maheshwari, Apoorva[a], Yash Jain, and **Shauhrat S. Chopra***. "Spatial inequity index for essential facility access at building-level in highly dense urban areas." **Cities** 149 (2024): 104926.
6. Miao, Y. [a], Hu, X., To, M.H., Wang, H., Qin, Z., Mou, J., Yan, W., Kaur, G., Roelants, S.L., Lin, C.S.K. and **Chopra, S.S.***, 2024. Environmental evaluation of emerging bakery waste oil-derived sophorolipids production by performing a dynamic life cycle assessment. **Sustainable Production and Consumption**, 47, pp.59-70.
7. Liu, Dongzhe[a], and **Shauhrat S. Chopra***. "Responding to the article" Is the reusable tableware the best option? Analysis of the aviation catering sector with a life cycle approach"." **Science of the Total Environment** 931 (2024): 172079.
8. Lindborg, PerMagnus, **Shauhrat S. Chopra**, and Katharina Groß-Vogt. "Data perceptualization for climate science communication." Frontiers in Psychology 14 (2023): 1263971.
9. Qin ZH, Fridrihsone A, Mou JH, Pomilovskis R, Godina D, Miao Y, Liu Z, Tsang CW, Zhang L, Xu C, **Chopra SS.** Valorisation of food waste into bio-based polyurethane rigid foams: From experimental investigation to techno-economic analysis**. Chemical Engineering Journal**. 2024 May 31:152680.
10. **Chopra, Shauhrat S.***, Sachini Supunsala Senadheera, Pavani Dulanja Dissanayake, Piumi Amasha Withana, Rajeev Chib, Jay Hyuk Rhee, and Yong Sik Ok. 2024. "Navigating the Challenges of Environmental, Social, and Governance (ESG) Reporting: The Path to Broader Sustainable Development" **Sustainability** 16, no. 2 **(2024)**: 606. https://doi.org/10.3390/su16020606
11. Xu, Zizhen[a], and **Shauhrat S. Chopra***. “Interconnectedness enhances network resilience of multimodal public transportation systems for Safe-to-Fail urban mobility" **Nature Communications** 14, no. 1 (2023): 4291. **(11 Citations, IF 16.6)**
12. Jia, Mingyi, Muhammad Usman Farid, Jehad A. Kharraz, Nallapaneni Manoj Kumar[a], **Shauhrat S. Chopra**, Am Jang, John Chew, Samir Kumar Khanal, Guanghao Chen, and Alicia Kyoungjin An*. "Nanobubbles in water and wastewater treatment systems: small bubbles making a big difference." **Water Research** (2023): 120613. **(0 Citations, IF 12.8)**
13. Roy, Shimul[c], Chu Ying Yi Jodie, and **Shauhrat S. Chopra***. "Life Cycle Environmental Impact Assessment of Cotton Recycling and the Benefits of a Take-Back System." **Resources, Conservation & Recycling Advances** (2023): 200177. **(0 Citations, IF NA)**
14. Hu, Xiaomeng[a], Jiaxin Guo, Alicia KJ An, and **Shauhrat S. Chopra***. “Electrospun Nanofibrous Membranes for Membrane Distillation Application- by Adopting a dynamic Life Cycle Assessment Approach.” **Water Research** (2023) 243 (2023): 120376. **(0 Citations, IF 12.8)**
15. Kumar, Nallapaneni Manoj[a], and **Shauhrat S. Chopra***. "Insights into material recovery, revenue, and global warming potential of India’s end-of-life photovoltaic installations reveals the urgent need for blockchain-based solar passports." **Sustainable Energy Technologies and Assessments** 58 (2023): 103326. **(0 Citations, IF 8)**
16. Shi, Congcan, Tianqi Wang, Shimul Roy[c], **Shauhrat S. Chopra**, Guangxue Chen, Jin Shang, Junfei Tian, and Yong Sik Ok. "From Waste to Resource: Surface-Engineered Spent Coffee Grounds as a Sustainable Adsorbent for Oil–Water Separation." **ACS ES&T Engineering** (2023). **(0 Citations, IF 7.1)**
17. Roy, Shimul[c], Yun Fat Lam, **Shauhrat S. Chopra**, and Md Mahbubul Hoque. "Review of Decadal Changes in
    ASEAN Emissions Based on Regional and Global Emission Inventory Datasets." **Aerosol and Air Quality Research** 23, no. 1 (2023): 220103. **(0 Citations, IF 4)**
18. Kumar, Nallapaneni Manoj [a], and **Shauhrat S. Chopra***. "Blockchain-assisted spent electric vehicle battery participation for load frequency control problems in interconnected power systems is resilient, low-carbon, and offers revenues to the operators." **Sustainable Energy Technologies and Assessments** 57 (2023): 103209. **(0 Citations, IF 8)**
19. Kumar, Nallapaneni Manoj[a], and **Shauhrat S. Chopra***. "Integrated techno-economic and life cycle assessment of shared circular business model based blockchain-enabled dynamic grapevoltaic farm for major grape growing states in India." **Renewable Energy** 209 (2023): 365-381. **(2 Citations, IF 8.7)**
20. Qin, Zi-Hao, Xiaomeng Hu[a], Jin-Hua Mou, Guo-Hui He, Guang-Bin Ye, Hong-Ye Li, **Shauhrat S. Chopra**, Liang Dong, Carol Sze Ki Lin, and Xiang Wang. "Environmental profiling microalgae-based eicosapentaenoic acid production along the technical advancement via life cycle assessment." **Journal of Cleaner Production** 397 (2023): 136477. **(1 Citations, IF 11.1)**

21. Bozeman III, Joe F., **Shauhrat S. Chopra**, Philip James, Sajjad Muhammad, Hua Cai, Kangkang Tong, Maya Carrasquillo et al. "Three research priorities for just and sustainable urban systems: Now is the time to refocus." **Journal of Industrial Ecology** 27, no. 2 (2023): 382-394. **(0 Citations, IF 5.9)**
22. **Chopra, Shauhrat Singh***, Dong Liang, Guneet Kaur, Christophe Lens, and Carol Sze Ki Lin. "Sustainable process design for circular fashion: Advances in sustainable chemistry for textile waste valorisation." **Current Opinion in Green and Sustainable Chemistry** (2022): 100747. **(1 Citations, IF 9.3)**
23. von Eiff, David, Joonho Yeo, Alicia Kyoungjin An, and **Shauhrat S. Chopra***. "Comparative Economic and Life
    Cycle Analysis of Future Water Supply Mix Scenarios for Hong Kong–A Water Scarce City." **Journal of Environmental Management** 325 (2023): 116370. **(1 Citations, IF 8.7)**
24. Milindi, Paschal Simon[a], Francesco De Lieto[b], and **Shauhrat S. Chopra***. "Food waste-Energy-Water-Emissions (FEWE) nexus in the food service sector: Comparing a restaurant meal from imported ingredients versus an imported ready-to-eat meal." **Journal of Cleaner Production** 380 (2022): 134871. **(1 Citations, IF 11.1)**
25. Prakash, K., M. Ali, M. A. Hossain, Nallapaneni Manoj Kumar[a], M. R. Islam, C. A. Macana, **Shauhrat S. Chopra**, and H. R. Pota. "Planning battery energy storage system in line with grid support parameters enables circular economy aligned ancillary services in low voltage networks." **Renewable Energy** 201 (2022): 802-820. **(1 Citations, IF 8.7)**
26. Kumar, Nallapaneni Manoj[a], and **Shauhrat S. Chopra***. "Leveraging blockchain and smart contract technologies to overcome circular economy implementation challenges." **Sustainability** 14, no. 15 (2022): 9492. **(17 Citations, IF 3.9)**
27. Kumar, Nallapaneni Manoj[a], Suprava Chakraborty, Satish Kumar Yadav, Jyotsna Singh, and **Shauhrat S. Chopra***. "Advancing simulation tools specific to floating solar photovoltaic systems–Comparative analysis of field measured and simulated energy performance." **Sustainable Energy Technologies and Assessments** 52 (2022): 102168. **(18 Citations, IF 8)**
28. Mohammed, Mazin Abed, Mahmood Jamal Abdulhasan, Nallapaneni Manoj Kumar[a], Karrar Hameed Abdulkareem, Salama A. Mostafa, Mashael S. Maashi, Layth Salman Khalid, Hayder Saadoon Abdulaali, and **Shauhrat S. Chopra.*** "Automated waste-sorting and recycling classification using artificial neural network and features fusion: a digital-enabled circular economy vision for smart cities." **Multimedia Tools and Applications** (2022): 1-16. **(8 Citations, IF 3.6)**
29. Yadav, Satish Kumar, Nallapaneni Manoj Kumar[a], Aritra Ghosh, Usha Bajpai, and **Shauhrat S. Chopra*.** "Assessment of soiling impacts and cleaning frequencies of a rooftop BAPV system in composite climates of India." **Solar Energy** 242 (2022): 119-129. **(3 Citations, IF 6.7)**
30. Hu, Xiaomeng[a], Alicia KJ An, and **Shauhrat S. Chopra***. "Life Cycle Assessment of the Polyvinylidene Fluoride Polymer with Applications in Various Emerging Technologies." **ACS Sustainable Chemistry & Engineering** 10, no. 18 (2022): 5708-5718. **(2 Citations, IF 8.4)**
31. Xu, Zizhen[a], Chuwei Zhang[b], and **Shauhrat S. Chopra***. "Robustness assessment of public bus transit system with a response-integrated approach for a resilient public transport system in Hong Kong." **Transportmetrica B: Transport Dynamics (**2022): 1-15. **(4 Citations, IF 2.8)**
32. Yeo, Joonho, **Shauhrat S. Chopra**, David von Eiff, Sanghyun Jeong, Lin Zhang, and Alicia Kyoungjin An. "An integrated techno-economic analysis on wastewater reclamation in Hong Kong: A comprehensive cost–Benefit analysis with life cycle assessment." **Journal of Cleaner Production** 357 (2022): 131838. **(3 Citations, IF 11.1)**
33. Gorjian, Shiva, Erion Bousi, Özal Emre Özdemir, Max Trommsdorff, Nallapaneni Manoj Kumar[a], Abhishek Anand, Karunesh Kant, and **Shauhrat S. Chopra***. "Progress and challenges of crop production and electricity generation in agrivoltaic systems using semi-transparent photovoltaic technology." **Renewable and Sustainable Energy Reviews** 158 (2022): 112126. **(41 Citations, IF 15.9)**
34. Xu, Zizhen[a], and **Shauhrat S. Chopra***. "Network-based assessment of metro infrastructure resilience with a spatial–temporal resilience cycle framework." **Reliability Engineering & System Safety** (2022): 108434. **(20 Citations, IF 8.1)**
35. Wang, Xiang, Chong Li, Chun Ho Lam, Karpagam Subramanian[c], Zi-Hao Qin, Jin-Hua Mou, Mushan Jin[a]… **Shauhrat S. Chopra** et al. "Emerging waste valorisation techniques to moderate the hazardous impacts, and their path towards sustainability." **Journal of Hazardous Materials** 423 (2022): 127023 **(35 Citations, IF 13.6)**
36. Elavarasan, Rajvikram Madurai, Rishi Pugazhendhi, G. M. Shafiullah, Nallapaneni Manoj Kumar[a], Mohammad Taufiqul Arif, Taskin Jamal, **Shauhrat S. Chopra***, and Joanna Dyduch. "Impacts of COVID-19

on Sustainable Development Goals and effective approaches to maneuver them in the post-pandemic environment." **Environmental Science and Pollution Research** (2022): 1-31. **(22 Citations, IF 5.8)**

37. Yuan, Xiangzhou, Nallapaneni Manoj Kumar[a], Boris Brigljević, Shuangjun Li, Shuai Deng, Manhee Byun, Boreum Lee, **Shauhrat S. Chopra*** et al. "Sustainability-inspired upcycling of waste polyethylene terephthalate plastic into porous carbon for CO 2 capture." **Green Chemistry** 24, no. 4 (2022): 1494-1504. **(35 Citations, IF 9.8)**.
38. Deng, Wei, Yajun Sun, Xiaoxue Yao, Karpagam Subramanian[c], Chen Ling, Hongbo Wang, **Shauhrat S. Chopra** et al. "Masks for COVID-19." **Advanced Science** 9, no. 3 (2022): 2102189. **(63 Citations, IF 15.1)**.
39. Xu, Zizhen[a], **Shauhrat S. Chopra***, and Hellas Lee. "Resilient urban public transportation infrastructure: a comparison of five flow-weighted metro networks in terms of the resilience cycle framework." **IEEE Transactions on Intelligent Transportation Systems** 23, no. 8 (2021): 12688-12699. **(11 Citations, IF 8.5)**
40. Senadheera, Sachini Supunsala, Piumi Amasha Withana, Pavani Dulanja Dissanayake, Binoy Sarkar, **Shauhrat S. Chopra**, Jay Hyuk Rhee, and Yong Sik Ok. "Scoring environment pillar in environmental, social, and governance (ESG) assessment." **Sustainable Environment** 7, no. 1 (2021): 1960097. **(14 Citations, IF 2.3)**
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42. Khalikova, Venera R., Mushan Jin[a], and **Shauhrat S. Chopra*.** "Gender in sustainability research: Inclusion, intersectionality, and patterns of knowledge production." **Journal of Industrial Ecology** 25, no. 4 (2021): 900-912. **(8 Citations, IF 5.9)**
43. Subramanian, Karpagam[c], Manas Kumar Sarkar, Huaimin Wang, Zi-Hao Qin, **Shauhrat S. Chopra**, Mushan Jin, Vinod Kumar, Chao Chen, Chi-Wing Tsang, and Carol Sze Ki Lin. "An overview of cotton and polyester, and their blended waste textile valorisation to value-added products: A circular economy approach–research trends, opportunities and challenges." **Critical Reviews in Environmental Science and Technology** (2021): 1-22. **(12 Citations, IF 12.6)**
44. Hu, Xiaomeng[a], Karpagam Subramanian[c], Huaimin Wang, Sophie LKW Roelants, Wim Soetaert, Guneet Kaur, Carol Sze Ki Lin, and **Shauhrat S. Chopra***. "Bioconversion of Food Waste to produce Industrial-scale Sophorolipid Syrup and Crystals: dynamic Life Cycle Assessment (dLCA) of Emerging Biotechnologies." **Bioresource Technology** 337 (2021): 125474. **(13 Citations, IF 11.4)**
45. Vishnupriyan, J., Dhanasekaran Arumugam, Nallapaneni Manoj Kumar[a], **Shauhrat S. Chopra***, and Pachaivannan Partheeban. "Multi-criteria decision analysis for optimal planning of desalination plant feasibility in different urban cities in India." **Journal of Cleaner Production** 315 (2021): 128146. **(17 Citations, IF 11.1)**
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Nallapaneni Manoj Kumar[a], G. M. Shafiullah, **Shauhrat S. Chopra***, and Mithulananthan Nadarajah. "Envisioning the UN Sustainable Development Goals (SDGs) through the lens of energy sustainability (SDG 7) in the post-COVID-19 world." **Applied Energy** 292 (2021): 116665. **(104 Citations, IF 11.2)**
47. Kumar, Nallapaneni Manoj[a], Mazin Abed Mohammed, Karrar Hameed Abdulkareem, Robertas Damasevicius, Salama A. Mostafa, Mashael S. Maashi, and **Shauhrat S. Chopra***. "Artificial Intelligence-based Solution for Sorting COVID Related Medical Waste Streams and Supporting Data-driven Decisions for Smart Circular Economy Practice." **Process Safety and Environmental Protection** 152 (2021): 482-494. **(37 Citations, IF 7.8)**
48. Subramanian, Karpagam[c], **Shauhrat S. Chopra***, Christopher M. Wharton, William Yonge, Julie Allen, Rozanne Stevens, Sam Fahy, and Paschal Simon Milindi. "Mapping the food waste-energy-water-emissions nexus at
commercial kitchens: A systems approach for a more sustainable food service sector." **Journal of Cleaner Production** 301 (2021): 126856. **(9 Citations, IF 11.1)**
49. Sajjad, Muhammad, Johnny CL Chan, and **Shauhrat S. Chopra***. "Rethinking disaster resilience in high-density cities: Towards an urban resilience knowledge system." **Sustainable Cities and Society** 69 (2021): 102850. **(39 Citations, IF 11.7)**

50. Subramanian, Karpagam[c], **Shauhrat S. Chopra***, Ezgi Cakin, Jiarun Liu[b], and Zizhen Xu. "Advancing neighbourhood sustainability assessment by accounting for sustainable development goals: A case study of Sha Tin neighbourhood in Hong Kong." **Sustainable Cities and Society** 66 (2021): 102649. **(14 Citations, IF 11.7)**
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52. Subramanian, Karpagam[c], **Shauhrat S. Chopra***, and Weslynne S. Ashton. "Capital-based life cycle sustainability assessment: Evaluation of potential industrial symbiosis synergies." **Journal of Industrial Ecology** 25, no. 5 (2021): 1161-1176. **(5 Citations, IF 5.9)**
53. **Chopra, Shauhrat S.,** Oshani Perera, Yossi Sheffi, and Samir K. Srivastava. "Aligning Purchasing Power with Sustainable Production and Consumption." **One Earth** 3, no. 1 (2020): 3-4. **(1 Citations, IF 16.2)**
54. Kumar, Nallapaneni Manoj[a], **Shauhrat S. Chopra***, Maria Malvoni, Rajvikram Madurai Elavarasan, and Narottam Das. "Solar Cell Technology Selection for a PV Leaf Based on Energy and Sustainability Indicators—A Case of a Multilayered Solar Photovoltaic Tree." **Energies** 13, no. 23 (2020): 6439. **(15 Citations, IF 3.2)**
55. Gholami, Hassan, Harald Nils Røstvik, Nallapaneni Manoj Kumar[a], and **Shauhrat S. Chopra***. "Lifecycle cost analysis (LCCA) of tailor-made building integrated photovoltaics (BIPV) façade: Solsmaragden case study in Norway." **Solar Energy** 211 (2020): 488-502. **(31 Citations, IF 6.7)**
56. Kumar, Nallapaneni Manoj[a], Aneesh A. Chand, Maria Malvoni, Kushal A. Prasad, Kabir A. Mamun, F. R. Islam, and **Shauhrat S. Chopra***. "Distributed energy resources and the application of AI, IoT, and blockchain in smart grids." **Energies** 13, no. 21 (2020): 5739. **(81 Citations, IF 3.2)**
57. Karthick, Alagar, Muthu Manokar Athikesavan, Manoj Kumar Pasupathi, Nallapaneni Manoj Kumar[a], **Shauhrat S. Chopra***, and Aritra Ghosh. "Investigation of inorganic phase change material for a semi-transparent photovoltaic (STPV) module." **Energies** 13, no. 14 (2020): 3582. **(91 Citations, IF 3.2)**
58. Kumar, Nallapaneni Manoj[a], Aritra Ghosh, and **Shauhrat S. Chopra*.** "Power Resilience Enhancement of a Residential Electricity User Using Photovoltaics and a Battery Energy Storage System under Uncertainty Conditions." **Energies** 13, no. 16 (2020): 4193. **(39 Citations, IF 3.2)**
59. Kumar, S. Ananda, M. S. P. Subathra, Nallapaneni Manoj Kumar[a], Maria Malvoni, N. J. Sairamya, S. Thomas George, Easter S. Suviseshamuthu, and **Shauhrat S. Chopra***. "A Novel Islanding Detection Technique for a Resilient Photovoltaic-Based Distributed Power Generation System Using a Tunable-Q Wavelet Transform and an Artificial Neural Network." **Energies** 13, no. 16 (2020): 4238. **(27 Citations, IF 3.2)**
60. Tan, Shawn Zheng Kai, Richard Du, Jose Angelo Udal Perucho, **Shauhrat S. Chopra**, Varut Vardhanabhut, and Lee Wei Lim. "Dropout in Neural Networks Simulates the Paradoxical Effects of Deep Brain Stimulation on Memory." **Frontiers in Aging Neuroscience** (2020): 12:273. **(9 Citations, IF 4.8)**
61. Subramanian, Karpagam[c], **Shauhrat S. Chopra***, Ezgi Cakin[b], Xiaotong Li, and Carol Sze Ki Lin. "Environmental life cycle assessment of textile bio-recycling–valorizing cotton-polyester textile waste to pet fiber and glucose syrup." **Resources, Conservation and Recycling** 161 (2020): 104989. **(61 Citations, IF 13.2)**
62. Kumar, Nallapaneni Manoj, Satish Kumar Yadav, **Shauhrat S. Chopra***, Usha Bajpai, Ramjee Prasad Gupta, Sanjeevikumar Padmanaban, and Frede Blaabjerg. "Operational performance of on-grid solar photovoltaic system integrated into pre-fabricated portable cabin buildings in warm and temperate climates." **Energy for Sustainable Development** 57 (2020): 109-118. **(34 Citations, IF 5.5)**
63. Malvoni, Maria, Nallapaneni Manoj Kumar[a], **Shauhrat S. Chopra***, and Nikos Hatziargyriou. "Performance and degradation assessment of large-scale grid-connected solar photovoltaic power plant in tropical semi-arid environment of India." **Solar Energy** 203 (2020): 101-113. **(58 Citations, IF 6.7)**
64. Kumar, Nallapaneni Manoj[a], Maria Malvoni, Nikos Hatziargyriou, and **Shauhrat S. Chopra***. "Data related to crystalline photovoltaic plant performance in the semi-arid climate of India." **Data in Brief** (2020): 105696. **(1 Citations, IF 1.2)**

65. Kumar, Nallapaneni Manoj[a], **Shauhrat S. Chopra***, Aneesh A. Chand, Rajvikram Madurai Elavarasan, and G. M. Shafiullah. "Hybrid renewable energy microgrid for a residential community: a techno-economic and environmental perspective in the context of the SDG7." **Sustainability** 12, no. 10 (2020): 3944. **(104 Citations, IF 3.2)**
66. Ahl, Amanda, Masaru Yarime, Mika Goto, **Shauhrat S. Chopra**, Nallapaneni Manoj Kumar[a], Kenji Tanakã, and Daishi Sagawa. "Exploring blockchain for the energy transition: Opportunities and challenges based on a case study in Japan." **Renewable and Sustainable Energy Reviews** 117 (2020): 109488. **(81 Citations, IF 15.9)**
67. **Chopra, Shauhrat S.***, Yuqiang Bi, Frank C. Brown, Thomas L. Theis, Kiril D. Hristovski, and Paul Westerhoff. "Interdisciplinary collaborations to address the uncertainty problem in life cycle assessment of nano-enabled products: case of the quantum dot-enabled display." **Environmental Science: Nano** 6, no. 11 (2019): 3256-3267. **(18 Citations, IF 7.3)**
68. Yeo, Joonho[a], **Shauhrat S. Chopra***, Lin Zhang, and Alicia Kyoungjin An. "Life cycle assessment (LCA) of food waste treatment in Hong Kong: On-site fermentation methodology." **Journal of Environmental Management** 240 (2019): 343-351. **(36 Citations, IF 8.7)**
69. Brown, Frank C., Yuqiang Bi, **Shauhrat S. Chopra**, Kiril D. Hristovski, Paul Westerhoff, and Thomas L. Theis (2018). "End-of-Life Heavy Metal Releases from Photovoltaic Panels and Quantum Dot Films: Hazardous Waste Concerns or Not?" **ACS Sustainable Chemistry & Engineering** 6, no. 7 (2018): 9369-9374. - 10.1021/acssuschemeng.8b01705. **(17 Citations, IF 8.4)**
70. Falinski, Mark M., Desiree L. Plata, **Shauhrat S. Chopra**, Thomas L. Theis, Leanne M. Gilbertson, and Julie B. Zimmerman. (2018). "A framework for sustainable nanomaterial selection and design based on performance, hazard, and economic considerations." **Nature Nanotechnology 13, no. 8 (2018): 708-714.** - doi.org/10.1038/s41565-018-0120-4. **(84 Citations, IF 38.3)**

Papers below are non-CityU

71. Mulrow, John, Weslynne Ashton, Sybil Derrible, and **Shauhrat S. Chopra** (2017). "Industrial Symbiosis at the Facility Scale" **Journal of Industrial Ecology**- *21*.3: 559-571. **(53 Citations, IF 5.9)**
72. Weslynne Ashton, **Shauhrat S. Chopra**, and Rahul Kashyap (2017). "Life and Death of Industrial Ecosystems" **Sustainability**- *9*.4: 605 **(26 Citations, IF 3.2)**
73. **Chopra, Shauhrat S.***, and Thomas L. Theis (2017). "Comparative Cradle-to-Gate Energy Assessment of Indium Phosphide and Cadmium Selenide Quantum Dot Displays." **Environmental Science: Nano**- *4*: 244- 254. **(13 Citations, IF 7.3)**
74. **Chopra, Shauhrat S.**, Trent Dillon, Melissa Bilec, and Vikas Khanna (2016). "A Network-based Framework for
Assessing Infrastructure Resilience: A Case Study of London Metro System" **Journal of the Royal Society Interface**- *13*.118: 20160113. **(107 Citations, IF 3.9)**
75. **Chopra, Shauhrat S**., Bhavik R. Bakshi and Vikas Khanna (2015). "Economic Dependence of U.S. Industrial Sectors on Animal-Mediated Pollination Service" **Environmental Science & Technology** 49.24: 14441-51. **(33 Citations, IF 11.4)**
76. Zaimes, George G., Nemi Vora, **Shauhrat S. Chopra**, Amy E. Landis, and Vikas Khanna (2015) "Design of Sustainable Biofuel Processes and Supply Chains: Challenges and Opportunities" **Processes** 3: 634-663. **(34 Citations, IF 3.5)**
77. **Chopra, Shauhrat S.**, and Vikas Khanna (2015). "Interconnectedness and Interdependencies of Critical Infrastructures in the U.S. Economy -Implications for Resilience." **Physica A: Statistical Mechanics and its Applications** 436: 865–877 **(65 Citations, IF1.295)**
78. **Chopra, Shauhrat S.**, and Vikas Khanna (2014). "Understanding resilience in industrial symbiosis networks: Insights from network analysis." **Journal of Environmental Management** 141: 86-94. **(134 Citations, IF 8.7)**

Patent and Workings Papers- Peer reviewed

1. OK, Y.S. (Korea University), LIM, H.K. (Ulsan National Institute of Science and Technology, Korea), Brigljevic, B.

(Ulsan National Institute of Science and Technology, Korea), Xiangzhou, Y. (Southeast University, China), Yu,
D.H. and **Chopra, S.S.**, Korea University Research, Business Foundation and UNIST Academy Industry Research Corp, 2023. *Method for evaluating waste plastic-derived porous carbon and method for manufacturing porous carbon*. U.S. Patent Application 17/975,237.

2. Van Ewijk, S. (University College London, United Kingdom), Ashton, W. S. (Illinois Institute of Technology, United States), Berrill, P. (Technical University of Berlin, Germany), Cao, Z. (University of Antwerp, Belgium), Chertow, M. (Yale University, United States), **Chopra, S. S**., Fishman, T. (Leiden University, Netherlands), Fitzpatrick, C.
(University of Limerick, Ireland), Heidrich, O. (Newcastle University, United Kingdom), Leipold, S. (Helmholtz
Centre for Environmental Research & University of Jena, Germany), Ritter, F. (Metabolic Institute, Netherlands), Sprecher, B. (Delft University of Technology, Netherlands), Yao, Y. (Yale University, United States), Myers, R. J.
(Imperial College London, United Kingdom) (2023). *Ten insights from industrial ecology for the circular economy*. Leiden, The Netherlands: International Society for Industrial Ecology (ISIE). https://is4ie.org/whitepaper

Journal Name	**Category (Scopus)**	**Ranking** ^ journal in top 10 percentile * new journal, ranking not representative	**No. of Papers**	**JIF**
Nature Nanotechnology	Engineering - Electrical and Electronic Engineering	2/738^	1	38.3
Nature Communications	Physics and Astronomy - General Physics and Astronomy	9/240^	1	16.6
One Earth	Environmental Science - General Environmental Science	7/227^	1	16.2
Renewable and Sustainable Energy Reviews	Energy - Renewable Energy, Sustainability and the Environment	9/235^	2	15.9
Advanced Science	Engineering - General Engineering	3/302^	1	15.1
Journal of Hazardous Materials	Environmental Science - Environmental Engineering	4/184^	1	13.6
Resources, Conservation and Recycling	Environmental Science Waste Management and Disposal	5/120^	1	13.2
Resources, Conservation and Recycling Advances	Economics and Econometrics	34/705^	1	N.A.
Water Research	Engineering - Civil and Structural Engineering	1/350^	2	12.8
Critical Reviews in Environmental Science and Technology	Environmental Science - Water Science and Technology	1/248^	1	12.6
Sustainable Cities and Society	Engineering - Civil and Structural Engineering	2/350^	2	11.7

Bioresource Technology	Environmental Science - Environmental Engineering	6/184^	1	11.4
Environmental Science & Technology	Environmental Science - Environmental Chemistry	8/139^	1	11.4
Applied Energy	Engineering - Building and Construction	1/200^	1	11.2
Journal of Cleaner Production	Environmental Science - General Environmental Science	5/227^	5	11.1
Green Chemistry	Environmental Science - Pollution	8/159^	1	9.8

Current Opinion in Green and Sustainable Chemistry	Environmental Science - Management, Monitoring, Policy and Law	15/384^	1	9.3
Environmental Pollution	Environmental Science - Health, Toxicology and Mutagenesis	6/133^	1	8.9
Renewable Energy	Energy - Renewable Energy, Sustainability and the Environment	23/235^	2	8.7
Journal of Environmental Management	Environmental Science - Management, Monitoring, Policy and Law	14/384^	3	8.7
IEEE Transactions on Intelligent Transportation Systems	Engineering - Mechanical Engineering	25/631^	1	8.5
ACS Sustainable Chemistry & Engineering	Chemical Engineering - General Chemical Engineering	13/272^	2	8.4
ChemSusChem	Environmental Science - Environmental Chemistry	13/139^	1	8.4
Reliability Engineering & System Safety	Engineering - Safety, Risk, Reliability and Quality	5/192^	1	8.1
Sustainable Energy Technologies and Assessments	Energy Engineering and Power Technology	42/252	3	8
Process Safety and Environmental Protection	Engineering - Safety, Risk, Reliability and Quality	8/192^	1	7.8
Environmental Science: Nano	Environmental Science - General Environmental Science	9/227^	2	7.3
ACS ES&T Engineering	Chemical Engineering miscellaneous	38/56*	1	7.1
Solar Energy	Materials Science - General Materials Science	46/453^	3	6.7
Journal of Industrial Ecology	Environmental Science - General Environmental Science	10/227^	4	5.9
Environmental Science and Pollution Research	Environmental Science - Health, Toxicology and Mutagenesis	23/133	1	5.8
Energy for Sustainable Development	Social Sciences - Geography, Planning and Development	63/779^	1	5.5

Frontiers in Aging Neuroscience	Neuroscience - Cognitive Neuroscience	39/109	1	4.8
Aerosol and Air Quality Research	Environmental Science-Pollution	36/159	1	4
Sustainability	Social Sciences - Geography, Planning and Development	101/779	4	3.9
Journal of the Royal Society Interface	Engineering - Biomedical Engineering	74/277	1	3.9
Multimedia Tools and Applications	Engineering - Media Technology	9/62	1	3.6
Processes	Engineering, Chemical (JCR)	63/149	1	3.5
Energies	Engineering - Engineering (miscellaneous)	27/151	5	3.2
Transportmetrica B: Transport Dynamics	Mathematics - Modeling and Simulation	36/316	1	2.8
Sustainable Environment	Environmental Sciences (JCR)	277/330*	1	2.3
Physica A: Statistical Mechanics and its Applications	Mathematics - Statistics and Probability	10/262^	1	1.295
Data in Brief	Multidisciplinary Multidisciplinary	37/134	1	1.2

Book Chapters

1. Chimanski, Roberto T., Marcell MC Maceno, and **Shauhrat S. Chopra**. "Neighborhood Sustainability Assessment (NSA) Tools: A Systematic Review on How to Choose the Best Analysis Tool." *Handbook of Sustainability Science in the Future: Policies, Technologies and Education by 2050* (2022): 1-23.
2. Subramanian, Karpagam[c], **Shauhrat S. Chopra**, Ezgi Cakin[b], Xiaotong Li, and Carol Sze Ki Lin. " Life Cycle Approaches to Evaluate Textile Bio-Valorization Processes: Sustainable Decision-making in Circular Economy" In *Waste Valorisation: Waste Streams in a Circular Economy*. Wiley, 2020.
3. Kumar, Nallapaneni Manoj[a], **Shauhrat S. Chopra**, and Pramod Rajput. "Life cycle assessment and environmental impacts of solar PV systems." In *Photovoltaic Solar Energy Conversion*, pp. 391-411. Academic Press, 2020. 4. Aghaei, Mohammadreza, Nallapaneni Manoj Kumar[a], Aref Eskandari, Hamsa Ahmed, Aline Kirsten Vidal de Oliveira, and **Shauhrat S. Chopra**. "Solar PV systems design and monitoring." In *Photovoltaic Solar Energy Conversion*, pp. 117-145. Academic Press, 2020.
5. Aghaei, Mohammadreza, Aref Eskandari, Shima Vaesi, and **Shauhrat S. Chopra**. " Solar PV power plants." In *Photovoltaic Solar Energy Conversion*, pp. 313-348. Academic Press, 2020.
6. Kumar, Nallapaneni Manoj[a], **Shauhrat S. Chopra**, Aline Kirsten Vidal de Oliveira, Hamsa Ahmed, Shima Vaezi, Uzoma Edward Madukanya, and Juan M. Castañón. "Solar PV module technologies." In *Photovoltaic Solar Energy Conversion*, pp. 51-78. Academic Press, 2020.

Dissemination of Research: Presentations

Invited Talks

Nov, 2023. Sustainable Future Water Supply Mix for Hong Kong–A Water Scarce City. The 5th IWA Resource Recovery Conference. Shenzhen. *Invited by Prof. Ming Xu, Tsinghua University.*

Jun, 2023. Need to further ESG Reporting toward Sustainable Development. 2023 Global ESG Forum.
CREATE, National University of Singapore. *Invited by Prof. Yong Sik Ok, Korea University.*

May, 2023. Hydrogen- Hype or Hope? SHARP Forum. City University of Hong Kong. Hong Kong. *Invited by College of Business, CityU.*

Jan, 2022. The Advances in Life Cycle Assessment Methodologies for Emerging Technologies and Systems. Division of Environment and Sustainability, HK University of Science & Technology. Hong Kong. *Invited by Prof Jimmy C H Fung, HKUST.*

Jul, 2022. Systems Approaches for Sustainable and Resilient Built Environment. Department of Chemistry, IIT Delhi, India. *Invited by Prof. Ramakrishna Ramaswamy, Indian Institute of Technology- Delhi.*

Jul, 2022. Systems Approaches for Sustainable and Resilient Built Environment. Department of Hydrology, IIT Roorkee, India. *Invited by Prof. Brijesh Kumar Yadav, Indian Institute of Technology- Roorkee.*

Aug, 2022. The Advances in Life Cycle Assessment Methodologies for Emerging Technologies and Systems. School of Computational and Integrative Sciences, Jawaharlal Nehru University. Delhi, India. *Invited by Prof. Shandar Ahmed, Jawaharlal Nehru University.*

Jul, 2022. Systems Approaches for Sustainable and Resilient Built Environment. Research Visit. Delhi, India. *Invited by Prof. Pushpendra Singh, IIIT Delhi.*

Oct, 2021. Quantifying Resilience Of Multi-modal Public Transportation System: Implications From Hong Kong. 2021 INFORMS Annual Meeting. Anaheim, USA. *Invited by Prof. Yeowon Kim, Carleton University.*

Nov, 2020. Data-driven Decision Making for Waste Management and Resource Efficiency: Path to a Circular Economy. Green Innovation Webinar Series. The Hong Kong Institute of Engineers (HKIE). *Invited by Ir. Prof. Louis Lock, HKIE.*

Nov, 2020. Systems Thinking to Achieve the Sustainable Development Goals. SDG Hub webinar. Climate Action Recognition Scheme 2020-21. Hong Kong. *Invited by Wofoo Social Enterprises.*

Mar 6, 2015. “Graph Theoretic Approaches to Understanding Resilience of Critical Infrastructure Systems” MITRE, McLean, VA.

Conference Talks and Posters

Bilec, MM, Bozeman, JF, Cai, H, CHOPRA, SS, Heidrich, O & Tong, K 2023, 'Just and Sustainable Urban Systems - Urgent Research Priorities', Paper presented at 11th International Conference on Industrial Ecology (ISIE2023), Ledien, Netherlands, 2/07/23 - 5/07/23. <https://isie2023.exordo.com/programme/presentation/308>

Saurabh, V & CHOPRA, SS 2023, 'Theory of Common Conflicts: Conceptualizing emergent ethics based view of social-ecological systems', Paper presented at 11th International Conference on Industrial Ecology (ISIE2023), Ledien, Netherlands, 2/07/23 - 5/07/23. <https://isie2023.exordo.com/programme/presentation/942>

Maheshwari, A & Chopra, SS 2023, 'SDG scoring at building-level for Hong Kong using Big Data and Machine
Learning approach', 11th International Conference on Industrial Ecology (ISIE2023), Ledien, Netherlands, 2/07/23 - 5/07/23. <https://isie2023.exordo.com/programme/presentation/85>

Xu, Z, Nallapaneni, MK & Chopra, SS 2023, 'Soft Infrastructure Enhancing Resilience in Industrial Symbiosis', 30th International Symposium on Sustainable Systems and Technology (ISSST 2023), Fort Collins, United States, 12/06/23 - 15/06/23.

Xu, Z & Chopra, SS 2023, 'Resilience of Multimodal Public Transportation Networks', 30th International Symposium on Sustainable Systems and Technology (ISSST 2023), Fort Collins, United States, 12/06/23 - 15/06/23.

Nallapaneni , MK & Chopra, SS 2023, 'Blockchain-based Artificial Intelligence of Things Nutrient-Rich Food Waste Selection Framework for Food Waste-derived Medical Textiles', International Conference on Solid Waste 2023, Wan Chai, Hong Kong, 31/05/23 - 3/06/23.

Nallapaneni, MK & Chopra, SS 2023, 'Cross-border Industrial Symbiosis Over in-City Industrial Symbiosis for Hong Kong City's Circular Dream', International Conference on Solid Waste 2023, Wan Chai, Hong Kong, 31/05/23 - 3/06/23.

Nallapaneni, MK & Chopra, SS 2023, 'When and How Solar Photovoltaic Waste Would Become a Burden for Hong Kong? and the Actionable Insights for Effective Management', International Conference on Solid Waste 2023, Wan Chai, Hong Kong, 31/05/23 - 3/06/23.

Vij, S, Maheshwari, A & Chopra, S 2022, 'Theory of Common Conflict: An Introduction', Development Research Conference (DevRes 2022), Sweden, 22/08/22 - 24/08/22.

Lo, JSC, Chao, CYH, Chopra, SS, Daoud, W, Leu, S, Ning, Z, Tso, CY, Chan, CK, Tang, S, Lee, HH, Firdous, I,
Deka, BJ & Lin, CSK 2022, 'Food Waste-derived Medical Textiles via Electrospinning for Healthcare Apparel and Personal Protective Equipment', Paper presented at 9th International Conference on Sustainable Solid Waste Management (CORFU 2022), Corfu, Greece, 15/06/22 - 18/06/22.

Yuan, X, Kumar, NM, Brigljević, B, Li, S, Deng, S, Byun, M, Lee, B, Lin, CSK, Tsang, DCW, Lee, KB, Chopra, SS, Lim, H, Ok, YS & Senadheera, S 2022, 'Sustainability-Inspired Upcycling of Waste Polyethylene Terephthalate Plastic into Porous Carbon for CO2 Capture', 8th International Symposium on Soil Organic Matter (SOM 2022), Seoul, Korea, Republic of, 26/06/22 - 30/06/22.

Chopra, S, Hessels, S & Black, KC 2022, 'Artistic Interpretation of Scientific Data on Extreme Weather to Raise
Public Awareness for Urban Resilience', Data Art for Climate Action (DACA 2022), Hong Kong, 23/02/22 - 26/02/22. <https://dataclimate.org/wp-content/uploads/2022/02/DACA_2022ProceedingsCatalogue.pdf#page=12>

Chopra, SS and Subramanian K 2021. ‘Mapping the Food waste-Energy-Water-Emissions Nexus at Commercial Kitchens: A Systems Approach for a More Sustainable Food Service Sector’, 2nd Food-Energy-WaterNexus Conference, AIChE. Feb 2021.

Nallapaneni, MK & Chopra, SS 2021, 'Algal Photobioreactor Façades Coupled with BAPV/BIPV in High-rise Urban Buildings Improves Indoor Air Quality and Enables Energy Resilience in Race to Net-Zero', 3rd International Conference on Renewable Energy, Sustainable Environmental and Agricultural Technologies, i-RESEAT 2021, Chiang Mai, Thailand, 22/12/21 - 23/12/21.

Nallapaneni, MK & Chopra, SS 2021, 'Blockchain-enabled dynamic grapevoltaic farms for selected wine risk regions on a global level and the potential opportunities for symbiotic industrial networks', 6th AIEE Energy Symposium Current and Future Challenges to Energy Security, Milan, Italy, 14/12/21-17/12/21.

Nallapaneni, MK & Chopra, SS 2021, 'Conceptual Design and Rationale for an Interdependent Farm MachineryAgrivoltaics Based Peer-to-Peer Concept in line with Circular Economy to Mitigate Smog Problem in Northern India', 3rd International Conference on Renewable Energy, Sustainable Environmental and Agricultural Technologies, i-RESEAT 2021, Chiang Mai, Thailand, 22/12/21 - 23/12/21.

Nallapaneni, MK & Chopra, SS 2021, 'Electric vehicles participation in load frequency control of an interconnected power system is not sustainable', 6th AIEE Energy Symposium Current and Future Challenges to Energy Security, Milan, Italy, 14/12/21 - 17/12/21.

Singh, A, Nallapaneni, MK & Chopra, SS 2021, 'Techno-economic analysis of a blockchain-enabled rooftop solar photovoltaic based peer-to-peer energy market using agent-based model', 6th AIEE Energy Symposium Current and Future Challenges to Energy Security, Milan, Italy, 14/12/21 - 17/12/21.

Nallapaneni, MK, Chopra, SS & D'Adamo, I 2021, 'Agrivoltaics for the co-production of soybeans-solar photovoltaics energy and the opportunities for developing synergetic industrial networks in India', 5th International Conference on Alternative Fuels, Energy and Environment (ICAFEE 2021): Future & Challenges, Kayseri, Türkiye, 15/10/21 - 18/10/21.

Nallapaneni, MK, Ng, YH & Chopra, SS 2021, 'An Integrated Marine Photovoltaics–Seawater Electrolysis System for Hydrogen Production in the Coastal Cities of Andhra Pradesh State in India', 5th International

Conference on Alternative Fuels, Energy and Environment (ICAFEE 2021): Future & Challenges, Kayseri, Türkiye, 15/10/21 - 18/10/21.

Nallapaneni, MK & Chopra, SS 2021, 'Sustainability and Resilience of Circular Economy Business Models Based on Digital Ledger Technologies', Waste Management and Valorisation for a Sustainable Future, Seoul, Korea, Republic of, 26/10/21 - 28/10/21.

NALLAPANENI, MK & Chopra, SS 2021, 'Battery Swapping/Charging Station for Electric Vehicles in Cities: Application of Blockchain-IoT for Sustainable and Resilient Swap-Pay-Go Battery Service', 2nd Actionable Science for Urban Sustainability (AScUS 2021), Segovia, Spain, 1/06/21 - 4/06/21.

Nallapaneni, MK, Xu, Z & Chopra, SS 2021, 'Blockchain-empowered Online Information Sharing Platform for Enhancing Resilience of Circular Energy Supplies', International Symposium on Sustainable Systems and Technology (ISSST 2021), 21/06/21 - 25/06/21.

Nallapaneni, MK & Chopra, SS 2021, 'Design and Analysis of Microgrids in Line with SDG7 for Residential Communities in the Global South', International Symposium on Sustainable Systems and Technology (ISSST 2021), 21/06/21 - 25/06/21.

Hu, X, Subramanian, K, Wang, H, Roelants, SLKW, To, MH, Soetaert, W, Kaur, G, Lin, CSK & Chopra, SS 2020,
'Guiding Environmental Sustainability of Emerging Waste-Derived Sophorolipid Production By Adopting a Dynamic Life Cycle Assessment (dLCA) Approach', Paper presented at 2nd Engineering Sustainable Development Conference, 15/12/20 - 17/12/20.

Hu, X, Subramanian, K, Wang, H, Roelants, SLKW, To, MH, Soetaert, W, Kaur, G, Lin, CSK & Chopra, SS2020, 'Guiding Environmental Sustainability of Emerging Bioconversion Technology for Sophorolipid Production By Adopting a Dynamic Life Cycle Assessment (dLCA) Approach', Paper presented at 2nd Sustainable Waste Management Conference (SWM 2020), 15/09/20 - 17/09/20.

Nallapaneni, MK & Chopra, SS 2020, 'Blockchain-based Online Information Sharing Platform for Improving the Resilience of Industrial Symbiosis-based Multi Energy Systems', Actionable Science for Urban Sustainability 2020 (AScUS-2020), Segovia, Spain, 3/06/20 - 5/06/20.

Hu, X, Guo, J, Deka, BJ, An, AK & Chopra, S 2020, 'Dynamic Life Cycle Assessment (dLCA) of Nano-enabled Membranes-based Membrane Distillation Technologies', Paper presented at Actionable Science for Urban Sustainability 2020 (AScUS-2020), Segovia, Spain, 3/06/20 - 5/06/20.

Nallapaneni, MK & Chopra, SS 2020, 'Enhancing the Resilience of Urban Networked Community Microgrids: Blockchain-enabled Flexible Energy Trading Strategy', Actionable Science for Urban Sustainability 2020 (AScUS-2020), Segovia, Spain, 3/06/20 - 5/06/20.

Kumar, NM & Chopra, SS 2019, 'Blockchain based digital infrastructure for circular economy', 8th International World Conference on Applied Science, Engineering and Management (WCSEM 2019), Fukuoka, Japan, 5/12/19 - 6/12/19.

Hu, X & Chopra, SS 2019, 'Life Cycle Assessment of Commercialized Polyvinylidene fluoride (PVDF) for Emerging Technologies', Paper presented at CPS 2019 International Conference on Cleaner Production and Sustainability, Hong Kong, Hong Kong, 30/10/19 - 2/11/19.

Kumar, NM & Chopra, SS 2019, 'Blockchain Technology for Tracing Circularity of Material Flows', 10th International Conference of the International Society for Industrial Ecology (ISIE 2019), Beijing, China, 7/07/19 - 11/07/19.

Chopra, SS 2018. ‘Towards Realizing the Potential of Blockchain Technology for Industrial Ecology’ Gordon Research Conference: Industrial Ecology, Les Diablerets, Switzerland. (Poster)

Research Grants

2023 Innovation Technology Fund – Partnership Research Programme: An, A.K.J., Sit,P., Ng, Y.H., Lam, J.C.H., Yu, D.Y.W., Liu, C., Peng, W., & CHOPRA, S. S "Green Hydrogen-Powered Off-Grid Energy-Water Station (Micro-Grid)" 1/10/2023 → 30/09/2026 (Co-Principal Investigator)

- Funding Amount: HKD 1,000,000 (Total HKD 12,000,000)

2023 Innovation Technology Fund – Platform project: An, A.K.J, & CHOPRA, S. S "Development of dual ammonia removal/recovery from reject liquor using a novel hollow fiber/flat sheet membrane distillation" 1/10/2023 → 30/09/2025 (Co-Principal Investigator)

- Funding Amount: HKD 200,000 (Total HKD 1,056,978)

2023 Sustainability Funding by Office of the Provost on Strategy and Implementation for Tracking CityU's
Carbon Footprint, CHOPRA, S. S "Developing a Carbon Neutrality Assessment Tool for Higher Education Institutions in Hong Kong" 1/04/2023 → 31/03/2024 (Principal Investigator)

- Funding Amount: HKD 200,000

2023 Sun Hung Kai Real Estate Agency Contract research with Low-Carbon and Climate Impact Research
Centre (LCCIC) CHOPRA, S. S. & NG, Y.H. (SEE, CityU) "Surveying Carbon-Zero Policies from Singapore, Shenzhen and Tokyo to inform Hong Kong's Carbon Neutrality Roadmap" 1/08/23 → 31/09/23 (Principal
Investigator)

- Funding Amount: HKD 250,000

2023 Strategic Interdisciplinary Research Grant: LONE, F. N. (School of Law, CityU) & CHOPRA, S. S. **"**Can an Indigenous Approach Towards the Exercise of Due Diligence Materialize Apolitical Sustainability of the YarlungTsangpo River? - An Interdisciplinary Enquiry". 1/04/23 → 31/03/25 (Co-Principal Investigator)

- Funding Amount: HKD 60,000 (Total HKD 296,214)

2022 Strategic Research Grant (SRG): CHOPRA, S. S. **"**Evaluating the Food Waste-Energy-Water-Emissions
(FEWE) Nexus: Focus on Reducing Impacts of Asian Cuisines and Ingredients in Hong Kong". 1/09/22 → 31/08/24
(Principal Investigator)

- Funding Amount: HKD 100,000

2022 Green Tech Fund, Environmental Protection Department: NG, Y. H. (SEE, CityU), Amal, R., CHOPRA, S.
S., LEUNG, K. H. M. (SEE, CityU), SHANG, J. (SEE, CityU) & WANG, S (SEE, CityU). "Turning Rivers and Streams in Hong Kong into the Source of Solar Hydrogen via Photocatalyst Panel". 1/04/22 → 31/03/25 (CoInvestigator)

- Funding Amount: HKD 800,000 (Total HKD 2,876,449)

2022 Applied Research Grant: LIN, S. K. C. (SEE, CityU), CHOPRA, S. S. & Kirpluks, M. "Bioconversion of Food Waste-Derived Lipid to Bio-Based Polyurethane Foam" 1/04/22 → 31/03/24 (Co-Principal Investigator)

• Funding Amount: HKD 100,000 (Total HKD 250,000)

2021 RGC General Research Fund: CHOPRA, S. S., LIN, S. K. C. (SEE, CityU), & Soetart, W (Ghent University).
"Dynamic Life Cycle Assessment (dLCA) of Emerging Waste Valorisation Technologies: Guiding Sustainable Waste-derived Biosurfactant Production". 1/01/22 → 31/12/24 (Principal Investigator)

• Funding Amount: HKD 684,406

2021 Donation Research Matching Grant: CHOPRA, S. S. "Neighbourhood Sustainability Tool for Low-Carbon
Living in Hong Kong – RMGS" 1/05/21 → 31/10/23 (Principal Investigator)

• Funding Amount: HKD 90,000

2020 RGC Collaborative Research Fund: LIN, S. K. C. (SEE, CityU), CHAN, C. K. (SEE, CityU), CHAO, C. Y. H. (PolyU HK), CHOPRA, S. S., DAOUD, W. (SEE, CityU), LEU, S. Y. (PolyU HK), NING, Z. (HKUST), TSO, C. Y. (SEE, CityU) "Reducing Transmission of Novel Coronavirus and Other Infectious Diseases using Food Wastederived Medical Textiles via Electrospinning for Healthcare Apparel and Personal Protective Equipment". 1/06/21 → 31/05/24 (Co-Principal Investigator)

• Funding Amount: HKD 800,000 (Total HKD 5,500,000)

2020 Strategic Research Grant (SRG)SRG-Fd: CHOPRA, S. S. **"**Dynamic Life Cycle Assessment of Emerging
Waste Valorisation Technologies for Sustainable Circular Economy Decision-Making" 1/09/20 → 31/08/22 (Principal Investigator)

• Funding Amount: HKD 100,000

2019 Global Consortium for Sustainability Outcomes Grant: CHOPRA, S. S., CHAN, C. K. (SEE, CityU), ALLEN, J. (King's College London), FAHY, S. (Dublin City University) & WHARTON, C. (Arizona State University) "Sustainable Kitchens: A Certification Programme". 1/09/19 → 30/06/23 (Principal Investigator)

• Funding Amount: HKD 627,000 (Total HKD 1,058,000)

2019 RGC Early Career Scheme Grant CHOPRA, S. S. "Network-based Resilience Assessment of the Multimodal Public Transport System in Hong Kong". 1/01/20 → 31/12/22 (Principal Investigator)

• Funding Amount: HKD 408,115

2019 CityU Startup: CHOPRA, S. S. "Multi-Dimensional Resilience Indicator for Urban Critical Infrastructure Systems" 1/03/19 → 31/08/22 (Principal Investigator)

• Funding Amount: HKD 200,000

2018 Teaching Start-up Grant: CHOPRA, S. S. "Integrating Life Cycle Assessment (LCA) Practical Training in SEE Undergraduate Curriculum". (Principal Investigator)

• Funding Amount: HKD 120,000

Consultancy Services through Outside Practice
2023 Business Environment Council Ltd. 'Major Revision of BEAM Plus Existing Buildings.' 08/06/2023 → 31/05/2024 (Principal Investigator)

• Funding Amount: 100,000

2023 Hong Kong Green Building Council Ltd. 'Deliver Short Courses on (i)Building Carbon Footprint Assessment; and (ii) LCA for Materials, Ecosystem Management, Climate Change Adaptation' 04/02/2023 →
22/04/2023 **(**Principal Investigator)

• Funding Amount: HKD 21,200

2022 EcoBricks Ltd. 'Consultancy Services for Life Cycle Assessments of Ecobricks.' 17/05/2022 → 28/02/2023
(Principal Investigator)

- Funding Amount: HKD 50,000

2022 Greenpeace East Asia. 'Realising Reuse in East Asia'**.** 04/04/2022 → 03/04/2023 (Principal Investigator)

- Funding Amount: HKD 186,000

2021 The Hong Kong Research Institute of Textiles and Apparel Limited. 'Consultancy Services for Lifecycle Assessment Training Programme'. 04/08/2021 → 31/07/2022 (Principal Investigator)

- Funding Amount: HKD 341,000

2021 Zero FoodPrint Asia Limited. 'Advisory Board of Zero Foodprint Asia'. 16/09/2021 → 30/09/2022 (Advisor)

- Funding Amount: Pro-bono

Service to University/School

Campus Service / Committee / Meeting	**Duration of Service**	**Role** *(e.g. Chair, Deputy Chair, Member)*	**Tier** *(University/ School)*	**Responsibilities and Accomplishments**
Outreach and Promotion Committee	2021 - 2022	Member	School	Make connections with important events on Sustainability, Energy and Environment in Hong Kong and overseas. Identify speakers from the industry to share the latest advances in the field.
School Graduate Studies Committee (SGSC) / School Research Committee (SRC)	2021 - Present	Member	School	Help conduct qualifying exams for RPg students.
Undergraduate Programme Committee	2019 - Present	Member	School	Help design and revise the curriculum for UG courses and assist with the admission process of new students.
Library Liaison Officer (LLO)	2019 - Present	Appointed Member	School	Liaison with the library staff to procure resources for SEE students and faculty.
Minor in Sustainability	2019 - 2021	Coordinator	School	Increase enrollment in the Minor and oversee the

				administrative duties as the coordinator.
SEE Website Redesign Committee	2020	Member	School	Revamped the SEE website along with Prof. Denis Yu.
CityU SEE x ReThink 2022 Collaboration – CityU SEE was the Content Partner of this session at the Future Leaders Stage, ReThink 2022.	2022	Coordinator	School	Co-curated the "Green Leaders of Tomorrow" day-long programme aimed at facilitating a two-way exchange and engagement between young professionals and sustainability practitioners with business leaders. Undergraduate students from SEE actively volunteered and participated in the event.
Catering Facilities Consultative Group (CFCG)	2022	Elected Member	University	Represent diversity of perspectives associated with the catering-related decisions on CityU campus.
Sustainability Committee	2019 - Present	Member	University	Aid the sustainable transition of the university campus.
Global Consortium for Sustainable Outcomes (GCSO)	2020 - Present	Representative	University	Represent CityU at the monthly meetings aimed at restructuring the existing GCSO model.
Climate Action Recognition Scheme - Strategic Partner	2021 - Present	Coordinator	University	Support the SDG Hub to organise the Climate Action Recognition Scheme related activities on CityU campus.
Hong Kong Sustainable Campus Consortium: Sustainable Education Working Group	2021 - Present	Representative	University	Collect and analyze information on sustainability education at CityU, specifically map the SDGs to each of the UG courses.
University-Government-Industry (UGI) Consortium for Sustainable Urban Development	2021 - Present	Member	University	Represent CityU at the Management Committee Meeting for the UGI Consortium for Sustainable Urban Development.

Outside Practice and Knowledge Transfer:

- The Connected Cities Conference 2022. StartmeupHK by InvestHk.
  9 September 2022- Invited Panelist
  Panel: Wheel of Sustainability

- ReThink HK 2022 Tuesday 6th October 2022
  Sustainable Transformation Theatre (Keynote) - Invited Panel Discussant
  Panel Title: "'Putting Climate Change at the Heart of Education'

- SEE Tech Talk Series: Environmental, Social, and Governance (ESG), Dec, 2022. *'Aligning ESG with the SDGs: The Urgency to Adopt Sustainability Science'*

- ReThink HK 2021 Tuesday 5th October 2021
  Sustainable Transformation Theatre (Keynote) - Invited Panel Discussant
  Panel: "Integrating Innovations to Accelerate Sustainable Development in Hong Kong"

- The Connected Cities Virtual Conference 2021. StartmeupHK by InvestHk.
  27 May 2021 - Invited Panel Discussant
  Panel: Upskilling for the Future

- Green Recovery for the Tourism and Hospitality Industries in Hong Kong Through Innovation & Technology by Green Hospitality - Invited Panel Discussant
  Panel: Role of Innovation & Technology in Green Recovery

- MPC 21 (https://mobilepaymentconference.com/)
  Aug 19, 2021 (US, Morning Eastern) - Invited Panel Discussant
  Panel: Environmental Social Governance (ESG) Investing: Opportunities and Challenges

- Sustainable Investing and ESG Conference co-organised by United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the World Green Organisation (WGO)
  26 October 2021 (Tue) - Invited Panel Discussant
  Panel Discussion on 'ESG investing: Investment for Good'

- Transit Jam 2020: Rethinking "Vehicles First". Thursday 17 September, 2020 – Invited Presentation 'Multi-modal approaches to bus transport'.

- Nerdnite Talk 2020
  'Climate Impact of the Frequent Flyer' Invited to speak with the general public on the negative impacts of the aviation sector.

- SEE Tech Talk Series on Waste Management and Treatment, Dec, 2018.
  Talk Title: 'Data-driven Decision Making for Waste Management and Resource Efficiency: Path to a Circular Economy.'

Summary of Professional Services

Contributions to External Bodies *(e.g. Professional Institutes / Boards / Disciplines / Community)*	**Duration of Service**	**Role** *(e.g. Editor, Chair, Officer, reviewer, member)*	**Responsibilities and Accomplishments** *(Please highlight contributions)*

Actionable Science for Urban Sustainability (AScUS)	2020 - Present	Founding member, Conference Organising Committee Member	The conference was organized by a group of researchers based in Asia, North America, Europe and Africa, who met as part of the Sustainable Urban Systems (SUS) section of the International Society for Industrial Ecology (ISIE). Before the pandemic, the AScUS 2020 was planned to be both remote and in-person in Spain. However, once travel was restricted, we converted the conference to virtual only event. Owing to the success of the event, we organized AScUS 2021 as a virtual conference. Since the events were a success and many researchers mentioned that they would like to have an in-person conference, which is being organized in March 2024, tentatively. City University of Hong Kong and School of Energy and Environment were well represented.
Data Art for Climate Action (DACA2022)	2022	DACA Advisor on Climate Science	Data Art for Climate Action (DACA2022) is a dualhub conference on interactive sonification and visualisation for climate science communication. As the advisor, I helped organize the conference and chair sessions. As part of the conference, we have created a special issue with my co-organisers, which is currently online already. The editorial piece associated with this special issue is currently under peer review. Per Magnus LINDBORG (SCM), Shauhrat Singh CHOPRA (SEE), Katharina Groß-Vogt, Area Editor, Area Editor, Area Editor, Frontiers in Psychology, July 2021 - June 2022. https://dataclimate.org/2021/07/01/shauhratchopra-scientific-advisor/
Materials Circular Economy (Journal)	2019 – Present	Editorial Board Member	Materials Circular Economy is a new Springer journal Science. As an Associate Editor, I have to get reviewers for submissions on on topics related to sustainable materials, 6Rs (reuse, recycle, redesign, remanufacture, reduce, recover), lifecycle engineering and life cycle assessment of materials.
City and Environment Interactions (Journal)	2019 - 2022	Editorial Board Member	City and Environment Interactions is a new Elsevier journal focused on the nexus of Climate – Sustainability – Resilience. As a member of the editorial board, my role was to seek and review top papers in the field.
Frontiers in Sustainable Cities (Journal)	2022 - Present	Editorial Board Member	Member of the Editorial Board of Urban Energy End-Use as Review Editor for Frontiers in Sustainable Cities.

Frontiers in Sustainability (Journal)	2022 - Present	Editorial Board Member	Member of the Editorial Board of Urban Energy End-Use as Review Editor for Frontiers in Sustainable Cities.
Sustainable Urban Systems (SUS) section of the International Society for Industrial Ecology	2022 - Present	Elected Board Member	My role as the Research Activities Coordinator is to be responsible for the collection and dissemination of international research opportunities with the SUS members as well as the larger ISIE community. At the most recent 2023 ISIE conference in the Netherlands, I was responsible for organizing the Best Poster Competition for Early Career Researchers.
Peer Reviewer for various SCI/SSCI journals	2018-2023	Reviewer	Reviewer for Top Journals in the Field: • Journal of Industrial Ecology • Environmental Science and Technology • Environmental Science: Nano • Public Transport • Ecological Economics • Journal of Rail Transport Planning & Management • Journal of Industrial Ecology • MDPI Sustainability • PLOS ONE • Management of Environmental Quality • Network Science *To name a few*
Grant Application Reviewer	2019-21	Reviewer	Helped peer review grant applications for an Italian foundation (Foundazione Cariplo) supporting Circular Economy research.
Grant Application Reviewer	2022	Reviewer	Provided extensive reviews for project application to Hong Kong's UGC

Administrative and Volunteer Service before joining CityU

- **2017 UIC's Chancellor's Committee on Sustainability and Energy *Climate Resilience Subcommittee***- Member
- **2017 International Society for Industrial Ecology-** Conference organizing committee
- **2017 Industrial Symbiosis Research Symposium-** Conference organizing committee
- **2016 International Symposium for Sustainable Systems and Technology-** Session Chair on "Impacts of Buildings"
- **2016 International Symposium for Sustainable Systems and Technology-** Scientific committee
- **2016 Postdoc Association at UIC**- Social Media Director and member of the executive committee
- **2013 National Energy Leadership Corps-** Performed community-based home energy assessments and repairs

PhD Supervision: List of Research Students

Student Name	Title of thesis	Status	Cosupervised?	Year of Graduation	Immediate Employer after Graduation	Current Employer
Xiaomeng HU	The Application of the Dynamic Life Cycle Assessment (dLCA) Framework to Guide Sustainable Design of Emerging Technologies	Graduated	No	2021	Post-doc at University of Hong Kong (HKU)	Post-doc in my group
Mushan JIN	Situating Smart City Discourse in Strategic Urban Planning in China: Discursive Practices, Policy Networks, and Institutional Arrangements	Graduated	No	2021	Post-doc at Hong Kong University of Science and Technology (HKUST)	Post-doc at HKUST
Manoj Kumar NALLAPANENI	Leveraging Blockchain and Smart Contract Technology for Sustainability and Resilience of Circular Economy Business Models	Graduated	No	2021	Post-doc in my group	Post-doc in my group
Zizhen XU	Four-phase Infrastructure Resilience Cycle Framework for Urban Multimodal Public Transportation Networks	Graduated	No	2022	Post-doc in my group	University of Cambridge (Marie Sklodowska-Curie Future Roads Fellow)
Dongzhe LIU	Life Cycle Assessment of Sustainable Reuse systems for the Circular Economy	Current student	No	2023 (expected)		
Paschal Simon MILINDI	Food WasteEnergy-WaterEmissions Nexus in Food Systems	Current student	No	2024 (expected)		
Apoorva MAHESHWARI	Localising SDGs at the building-level for Urban Sustainability	Current student	No	2025 (expected)		

Saurabh Vij	"Well-being" Integrated Accounting System to counteract the contemporary flaws of Corporate Sustainability Reporting	Current student	No	2025 (expected)		
Yahui MIAO	Sustainable design of Waste-valorised Sophorolipids through dynamic Life Cycle Assessment (dLCA)	Current student	Yes, this PhD student is cosupervised with Prof. Carol Lin, who is my Co-I on the dLCA GRF project.	2026 (expected)		
Feiya Chen	People-centric Resilience in the Built Environment	Current student	No	2027 (expected)		

Teaching Performance: Summary of TLQ Records

Term	Course Title	Level	Class Size	Response Rate	TLQ Score
Semester B 2022/23	SEE6115 Carbon Audit and Management, SEE8115 Carbon Audit and Management	PG	39	82.50	4.47 out of 5
Semester A 2022/23	SEE1003 Intro to Sustainable Energy & Environmental Engineering	UG	58	55.17	4.09 out of 5
Semester A 2022/23	SEE4116 Energy & Carbon Auditing	UG	57	49.35	4.13 out of 5
Semester B 2021/22	SEE1003 Intro to Sustainable Energy &	UG	65	47.69	5.03 out of 7
	Environmental Engineering				
Semester B 2021/22	SEE3205 Urban Sustainability	UG	46	32.61	5.60 out of 7

Semester B 2020/21	SEE1003 Intro to Sustainable Energy & Environmental Engineering	UG	52	32.69	5.65 out of 7
Semester B 2020/21	SEE4116 Energy & Carbon Auditing	UG	68	50.00	5.47 out of 7
Semester B 2019/20	SEE1003 Intro to Sustainable Energy & Environmental Engineering	UG	76	51.32	5.49 out of 7
Semester B 2019/20	SEE3205 Urban Sustainability	UG	16	37.50	5.83 out of 7
Semester B 2018/19	SEE1003 Intro to Sustainable Energy & Environmental Engineering	UG	68	55.88	5.89 out of 7
Semester B 2018/19	SEE2204 Principles of Sustainability	UG	31	67.74	6 out of 7
Semester B 2017/18	SEE1003 Intro to Sustainable Energy & Environmental Engineering	UG	73	65.75	5.5 out of 7