

Information on Postgraduate Research Scholarship - Ref: Horizon-GBS-01-24			
Faculty:	Greenwich Business School	School:	BOS
Lead Supervisor:	Professor Li Zhou		
Project Title:	Developing innovative business models for Battery as a Service (BaaS)		
Project Description: (500 words)	<p>We are excited to offer a fully-funded PhD scholarship as part of the ground-breaking CIRCUBATT project, funded by Horizon Europe. This innovative research aims to transform battery technologies through circulareconomy principles, ensuring resilience, competitiveness, and sustainability. Join us in 2025 and contribute to shaping the future of energy storage and sustainable technologies.</p> <p>About the project</p> <p>The transition towards renewable energy sources and the electrification of transport underscores the increasing reliance on battery technologies. Concurrently, this surge in battery usage poses significant sustainability challenges, particularly in terms of waste management and resource depletion. The "<u>Battery as a Service</u>" (BaaS) business models have emerged as a promising approach for transitioning toward a circular battery economy. It shifts the focus from selling batteries to selling battery services, incentivising manufacturers to design for longevity, remanufacture, and responsible end-of-life management.</p> <p>Nevertheless, while BaaS holds significant potential, several research gaps require further exploration.</p> <ul style="list-style-type: none"> • Limited understanding of optimal BaaS models for different battery applications, especially, secondary use of spent batteries. • Limited understanding of social impact of BaaS across the entire battery lifecycle. • Lack of comprehensive frameworks for assessing the economic, environmental, and social viability of BaaS across the entire battery lifecycle from commercial aspect. • Lack of comprehensive frameworks for BaaS risk management and mitigation strategy. • Insufficient knowledge on integrating big data and machine learning (ML) for optimising battery use, maintenance, and end-of-life decision-making within BaaS models. <p>Therefore, part of CIRCUBATT will explore innovative business models, such as BaaS and develop cross-industry tools like battery sustainability analysis and artificial intelligence-driven data analytics. The purpose of this PhD project is to develop strategies and tactics that promote BaaS business models from a sustainability perspective while assessing their commercial feasibility and viability.</p>		

	<p>We welcome both quantitative and qualitative research approaches, with a preference for big-data driven decision-making using machine learning models.</p> <p>How to apply</p> <p>If you are passionate about pioneering research and eager to make a real-world impact, we invite you to connect with our dynamic and supportive team. This is a unique opportunity to collaborate on cutting-edge solutions in battery technology and circular economy, working alongside leading experts in the field. For an informal discussion about your application or to share your research ideas, please reach out to one of the members of the team. We encourage candidates who are curious, motivated, and committed to sustainability to apply. Prepare the required documents outlined below and take the next step towards a fulfilling research career with us.</p> <p>We look forward to welcoming innovative minds to our team.</p> <p>Interviews are scheduled for Friday 28th February .</p>
Duration:	3 years
<p>Bursary available (subject to satisfactory performance):</p> <p>We are offering a prestigious three-year, full-time PhD scholarship for exceptional candidates. Each scholarship covers full home PhD fees (currently £4,786) and provides an annual stipend set at the Living Wage Foundation rate, currently £19,237. The stipend will be adjusted annually in line with the Foundation's updates, ensuring continued financial support throughout your research journey.</p> <p>With a total annual bursary of £24,023, this opportunity is also open to international (including EU) applicants. International students will receive the same total bursary, though they are expected to cover the difference between home and international tuition fees.</p> <p>This scholarship offers a unique chance to engage in impactful research, with financial security and support.</p>	
Person Specification of Essential (E) or Desirable (D) requirements:	
Criteria:	E or D
Education and Training:	
<ul style="list-style-type: none"> 1st Class or 2nd class, First Division (Upper Second Class) honours degree or a taught master's degree with a minimum average of 60% in all areas of assessment (UK or UK equivalent) in a relevant area to the proposed research project 	E
<ul style="list-style-type: none"> For those whose first language is not English and/or if from a country where English is not the majority spoken language (as recognised by the UKBA), a language proficiency score of at least IELTS 6.5 (in all elements of the test) or an equivalent UK VISA and Immigration secure English Language Test is required. Unless the degree above was taught in English and obtained in a majority English speaking country, e.g. UK, USA, Australia, New Zealand, etc, as recognised by the UKBA. 	E
Experience & Skills:	
<ul style="list-style-type: none"> Previous experience of undertaking research (e.g. undergraduate or taught master's dissertation) 	E
<ul style="list-style-type: none"> Able to complete independent work successfully, under guidance 	E
<ul style="list-style-type: none"> Understands the fundamental differences between a taught degree and a research degree in terms of approach and personal discipline/motivation 	E

<ul style="list-style-type: none"> • Good communication skill 	E
Other Requirements:	
<ul style="list-style-type: none"> • Experience with data analysis for a business or a project 	D
<ul style="list-style-type: none"> • Programming skills (e.g., Python, R, SQL) 	D
<ul style="list-style-type: none"> • Deep knowledge of a specific research methodology, such as case studies, mathematical optimisation, survey, etc. 	D
Closing date for applications:	Friday 21st February 2025
For further information contact:	<p>Professor Li Zhou: ZL14@gre.ac.uk Dr. James Quang Duong: Quang.Duong@greenwich.ac.uk Dr. Carlos Fernandez De Arroyabe Arranz: C.FernandezDeArroyabeArranz@greenwich.ac.uk Dr. Maggie Mao Xu: m.xu@greenwich.ac.uk</p>
<p>Making an application: Please read this information before making an application. Information on the application process is available at: https://www.gre.ac.uk/research/study/apply/application-process. Applications need to be made online via this link: https://nelson.gre.ac.uk/pls/prod/bwskalogs.P_DisplLoginNon. No other form of application will be considered.</p> <p>All applications must include the following information. Applications not containing these documents will not be considered.</p> <ul style="list-style-type: none"> • Personal statement– explaining why you are applying. • Please select ‘Greenwich Business School’ as the Faculty, MPhil/PhD Business as the Programme and BOS as the Department. • Scholarship Reference Number (Horizon-GBS-01-24)– included in the personal statement • Research proposal (3,000 words excluding ‘List of references’)– consisting of ‘Research background with research aim and objectives’, ‘Literature review, identifying research gaps’, ‘Proposed research methodology’, ‘Research plan and Gantt chart’, ‘Conclusion’ and ‘List of references. • CV including 2 referees * • Academic qualification certificates • Transcripts for both undergraduate and postgraduate studies • IELTs/English Language certificate if you are an international applicant or if English is not your first language or you are from a country where English is not the majority spoken language as defined by the UK Border Agency *. For IELTS, 6.5 Overall with no individual component below 6.5. <p><i>*upload to the qualification section of the application form. Attachments must be a PDF format.</i></p> <p>Before submitting your application, you are encouraged to liaise with the Lead Supervisor on the details above.</p>	