

## Recruitment Team at Santos Ltd

June 30, 2022

LEVEL 7  
100 ST GEORGES TERRACE  
PERTH  
WESTERN AUSTRALIA, 6000

### Re: Santos 2022/2023 Summer Vacation Program

Dear Recruitment at Santos,

With my strong background in research and flow assurance stemming from my PhD Candidature and my First Class Honours degree in Chemical Engineering, I am confident that I will be a great fit with the team at Santos in any capacity and location.

My robust research background stems from my PhD and Honours at UWA and my maintenance research internship at Downer Group. My PhD has been focused on developing a more physically robust model for hydrate phase equilibria to improve the prediction accuracy. This work is highly relevant to midstream oil and gas operations in reducing the associated mono-ethylene glycol (MEG) requirement for total inhibition. I chose to pursue a PhD in this field because my passion for chemical engineering stems from my interest in process optimisation. The fulfilment of this undertaking further reinforced this passion. I wish to expand and apply this knowledge to fields within and outside this area with Santos, where I can significantly contribute to engineering projects and work towards Santos's goal of net-zero by 2040. I am in the penultimate year of PhD and expect to submit my thesis in Q2/Q3 2023. During my time at university, my exemplary academic record is complimented by a repertoire of teamwork, problem-solving, communication and leadership skills; I believe these traits and capabilities make me a valuable addition to Santos.

I believe my experience will enable me to fit in well with Santos' key values. My internship at Downer Group in 2016 was the launchpad of my research journey, allowing me to begin developing my communication skills and extending my knowledge of key maintenance concepts and technologies within the engineering field. Throughout my PhD, I have developed my written and verbal communication skills extensively through presenting my research to both technical and non-technical audiences in both poster and oral presentations at various conferences and symposia. Most recently, I presented at one of UWA's Tieback Symposia on the new hydrate phase boundary tool I developed in December 2021, the culmination of my PhD to date then, which was received well by industry members present. The research, analytical and problem-solving skills I have developed during my research career have fostered a creative and critical mindset that encourages innovative thinking.

I value a working and social environment that is safe and conducive for excellence in the future. From an operational perspective, I have experience of over 300 hours working in labs with hazardous chemicals and equipment at the Australian Resources Research Centre (ARRC) for my honours thesis. I also conduct safety inspections for my research group at both ARRC and UWA laboratories every second month. Additionally, I have also undertaken numerous lab demonstrations for third-year engineering students, where I was solely responsible for their supervision and informed them of the necessary safety requirements before entry and during the laboratory session. These experiences have instilled the importance of identifying hazards and implementing thorough risk management plans, leading me to be constantly aware of my peers and surroundings and ensuring I wear the appropriate PPE. From a social perspective, my experience as a Postgraduate Unimentor at UWA and an Academic Tutor have exposed me to various students with different learning styles and backgrounds. These experiences have fostered vital skills such as active listening, initiative and cultural awareness, which will serve me well when adjusting to working in a new team in an unfamiliar environment.

Thank you for taking the time to consider my application and review my resume. I look forward to any opportunity to discuss the position and what I can do for Santos. I believe my vision and values align with Santos, and I'd be an excellent fit for the company. My contact details are listed if you require any other information.

Yours Sincerely,

**David Jinher Zhu**