

Kalen Josifovski

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Education

University College London (UCL) – MSc Chemical Research

Graduated with merit.

London, UK

Sep. 2021 – Sep. 2022

University of Nottingham (UoN) – BSc Medicinal and Biological Chemistry

First-Class Honours (1:1).

Nottingham, UK

Sep. 2017 – May. 2020

Experience

Travel

Asia

Career Break

Jan. 2024 – Nov. 2024

- Took a career break to fulfill a long-held dream of traveling through Asia, immersing myself in its diverse cultures and experiences. During this time, I also achieved my advanced diving certification, further enhancing my personal growth and sense of accomplishment.

Charnwood Molecular

Loughborough, UK

Associate Research Chemist

Nov. 2022 – Dec. 2023

- Designed novel small molecule compounds for the treatment of various therapeutic areas, measured by improved potency and selectivity.
- Leveraged molecular modelling tools to identify structure-activity trends, resulting in the identification of lead compounds with superior biological activity and desirable physicochemical properties.
- Designed and executed synthetic routes, optimising reaction conditions to maximise yield and purity.
- Employed analytical techniques to ensure compound purity and characterise intermediates and final products.
- Collaborated cross-functionally with biologists and pharmacologists to interpret assay results, driving informed decision-making and facilitating efficient compound optimization.
- Presented research progress and results to clients in project meetings, facilitating effective communication on a weekly basis.
- Implemented new Standard Operating Procedures (SOPs) as a microwave super-user, resulting in improved safety protocols and optimised utilisation of the equipment.
- Spearheaded the synthesis strategy for the company's entry in the 11th RSC retro-synthesis competition, enhancing strategic planning and challenging my expertise in advanced organic synthesis.

UCL School of Chemistry

London, UK

Graduate Researcher – Anderson Group

Sep. 2021 – Sep. 2022

- Conducted an independent investigation to explore the scope of novel methodology by performing meticulous control experiments and screening diverse reaction conditions.
- Conducted thorough literature reviews to support the development of this synthetic methodology and deepen the understanding of potential reaction mechanisms.
- Maintained laboratory equipment and upheld strict adherence to safety protocols, ensuring a safe and productive work environment.
- Collaborated with colleagues on various research projects, gaining valuable exposure to diverse experimental techniques.

PRA world Ltd.

Melton Mowbray, UK

Research technician

Sep. 2020 – May. 2021

- Accomplished large-scale process development for the efficient extraction and purification of carbon black from end-of-life tyres, resulting in improved yield and purity, achieved through rigorous experimentation and optimization.
 - Successfully functionalised carbon black nanoparticles by introducing hydrophilic linkers, measured by enhanced compatibility and suitability for use as additives in paints and plastics, through systematic chemical modification
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techniques.

- Conducted formulation testing and particle size measurements on the modified carbon black to ensure optimal physical characteristics; including improved dispersion and particle size control, meeting specific application requirements.
 - Fostered productive relationships and achieved project milestones through collaboration with partner companies in project development
 - Conducted an extensive search of patent literature to ensure process novelty and avoid infringement of existing patents.
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Skills, Certifications & Interests

Technical Skills

- Advanced laboratory skills including: organic synthesis, purification techniques, and characterisation methods (e.g HPLC-MS, 1D and 2D NMR).
- Strong knowledge of the drug design pipeline and the importance of mapping structure-activity relationship (SAR).
- Highly proficient in utilising industry-standard software; including ChemDraw for visualisation, as well as data analysis software such as Mestrenova suite, Masslynx, and Topspin.
- Strong written and verbal communication abilities, including the ability to present scientific findings effectively.
- Ability to carryout cheminformatics workflows using python including: library searching, database querying, docking and physical property prediction.
- Experience using the following python libraries and API's: numpy, scipy, RDkit, Openeye TK, openFF, openMM, MDTraj, pymol, ngview, chembl_webresource_client and psi4.

Courses & Certifications

- University of California Irving - PharmSci 175/275. [Drug Discovery Computing Techniques](#).
- Volkamer Lab. (DOI:10.5281/zenodo.1486226). [TeachOpenCADD](#).
- HarvardX: [PH526x: Using Python for Research](#).

Personal Skills & Interests

- Right to work in both the UK and EU.
 - Full UK driving licence.
 - Bilingual – English (Native), Macedonian (Fluent).
 - SSI certified advanced open water scuba diver with 40+ verified dives.
 - Five years experience as a practitioner of Muay Thai; a striking martial art originating in Thailand.
 - V6 grade in bouldering and 6c+ grade in roped climbing.
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