

Paper Submission Form - SAIP2025 Proceedings

Sections A, C, D, and E must be completed by all authors (including students) who submit papers. Section B is compulsory for students who submit manuscript(s).

Section A: Paper Submission Information

Paper/Abstract ID	ID No. 61
Paper title	Enhancing the Efficacy of Photodynamic Therapy: The Role of Hypocrellin B, Quercetin, and their combinations in a Human Breast Cancer Cell Line
Corresponding Author Name & Surname:	Shreeja S. Rajan
Corresponding Author Email Address:	srajan@uj.ac.za

Section B: For Students & Supervisors

Supervisor Name & Surname:	Heidi Abrahamse
Supervisor Email Address:	habrahamse@uj.ac.za

For this paper, the supervisor must agree/disagree with the following statements.

	Yes	No
1. I am aware that the above-mentioned paper is being submitted for possible publication in the Proceedings of the SAIP Conference. I am satisfied that the presented work is that of the listed authors. I hereby give consent to the submission	x	
2. I have proof-read the manuscript	x	
3. I am satisfied that the manuscript is written in appropriate English and is sufficiently free of grammatical and spelling errors	x	
4. I am familiar with the required manuscript format ("House Style"), and I am satisfied that this manuscript meets the criteria. I am aware that manuscripts not conforming with House Style may be desk rejected	x	
5. I am satisfied that the scientific content of this manuscript is of sufficient standard for it to be considered for publication in the Proceedings of the South African Institute of Physics Conference Proceedings	x	

Student Name & Surname: Shreeja S. Rajan

Signature: 

Date: 31/07/2025

Supervisor Name & Surname: Heidi Abrahamse

Signature: 

Date: 31/07/2025

Section C: Suggested Reviewers

Obtaining the two referee reports necessary for DHET subsidy is an onerous task.

Please provide the names and contact details of three qualified South African and/or international referees. Referees should have a PhD and expertise in the relevant area of Physics. Do not recommend referees who have co-authored a work with any of the authors on the manuscript within the past five (5) years. Manuscripts without three recommended referees may be subject to desk rejection.

Suggested Reviewers in your Research Field (Both local & international)		
	Reviewer Names & Surname	Reviewer's Email Address(es)
Suggested reviewer #1	Samivel Ramachandran	rkumari@ksu.edu.sa
Suggested reviewer #2	Niluni Wijesundara	niluni@uwu.ac.lk
Suggested reviewer #3	Wasitha Thilakanatne	ws714884@dal.ca

Section D: Declaration of Novelty and Use of AI

How is this submitted manuscript scientifically novel?

This research presents a novel approach to breast cancer treatment by investigating the combined therapeutic potential of hypocrellin B (HB) and quercetin (Quer) in photodynamic therapy (PDT). The study's uniqueness lies in exploring the synergistic effects of these two agents, which may enhance PDT efficacy and induce significant cytotoxic effects in cancer cells. By evaluating the impact on cell viability, oxidative stress, mitochondrial integrity, and apoptosis, this research provides valuable insights into the potential of HB and Quer as effective PDT agents for breast cancer therapy, warranting further exploration in clinical applications.

Please see the [Author Guidelines for the AI use policy](#).

How was AI used in the generation of this manuscript?

The generation of this manuscript likely didn't directly involve AI, as it's a research paper detailing specific experiments and results in photodynamic therapy for breast cancer. However, AI or machine learning tools are used for tasks like data analysis, literature review, or identifying patterns in their results. AI can assist in streamlining research processes, but the core content of this manuscript, including the experimental design, data collection, and interpretation, appears to be the result of research efforts.

Section E: Plagiarism

	Yes
I am aware that plagiarism detection software may be used on my manuscript.	x