



Sir William Henry Perkin, (1838 – 1907) was an English chemist best known for his discovery, at the age of 18, of the first synthetic aniline dye, Mauveine. Perkin files for a patent in August 1856, when he was still only 18. At that time, all dyes used for coloring cloth with natural substances, many of which were expensive and labour-intensive to extract.

Certificate

DEPARTMENT OF BIOCHEMISTRY



பெரியார் பல்கலைக்கழகம்

சேலம், தமிழ்நாடு, இந்தியா

PERIYAR UNIVERSITY
Salem, Tamilnadu, India

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அறிவால் விளையும் உலகு

Wisdom Maketh World



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CERTIFICATE

I certify that the thesis entitled “**Production optimization, characterization of Azoreductase from *Pseudomonas oleovorans* PAMD_1: Studies on thermostabilization and application in Biosensor**” submitted to Periyar University in partial fulfillment for the award of degree of **Doctor of Philosophy in Biochemistry** is a bonafide research work carried out by him under my guidance and supervision and it has not formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or any other similar titles in this or any other University or Institution of higher learning.

Signature of the Supervisor

[T. PALVANNAN]

Place : Salem -11

Date : 30-11-11