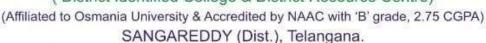
## TARA GOVERNMENT COLLEGE, SANGAREDDY

(ISO 9001:2015 certified)



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## **Certificate**

25 Aug 2022

This is to certify that **Dr. K. Vani**, has been working in this college as an Assistant Professor of Chemistry in this college. She was transferred from Kakatiya Government College Hanamkonda, Telangana. The patent was sanctioned to her while she has been working at this college.



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H01M0008044400, C12P0007620000,

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## (54) Title of the invention : A SYSTEM FOR EVALUATING ACCURATE ESTIMATION OF ESSENTIAL ENZYME KINETIC PARAMETERS AND METHOD THEREOF

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(57) Abstract:

The present invention discloses a system for evaluating accurate estimation of essential enzyme kinetic parameters and method thereof. The system is including, but not limited to, a canonical approach used to understand enzyme kinetics based on the Michaelis-Menten equation (MM equation) using the standard quasi-steady-state approximation (sQSSA); wherein the equation describes the dependence of enzyme-catalyzed reaction rates on the concentration of substrate by using two parameters, the catalytic constant, kcat and the Michaelis-Menten constant, KM, and Te Kcat determines the maximum rate of the reaction at saturating substrate concentrations, Vmax=kcatET, where ET is total enzyme concentration, and the KM is the substrate concentration at which the reaction rate is half of Vmax.

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