Dr. O. M. KIRTHIGA

Residence: 2A, Srinivasa Perumal Kovil Street, Mobile: 91-7418411751

Kamarajar Salai, Madurai - 625 009.

E-mail: kirthi024@gmail.com

OBJECTIVE

Wish to work in a challenging environment that encourages continuous learning where I could show my potential with dedication in the development of the concern.

ACADEMIC PARTICULARS

Class/Course	Name of the Institution	% of marks	Year of passing
Ph. D	Madurai Kamaraj University, Madurai	-	2017
M. Sc	Lady Doak College, Madurai.	79%	2012
B. Sc	Lady Doak College, Madurai.	83%	2010
HSC	Nirmala Girl's H.S. School, Madurai	88%	2007
S.S.L.C	Nirmala Girl's H.S. School, Madurai	86%	2005

PUBLICATIONS IN NATIONAL AND INTERNATIONAL JOURNALS

- ❖ O. M. Kirthiga, L. Rajendran, Analytical expressions of the concentrations of substrate, biomass, and ethanol for solid-state fermentation in biofuel production, **Energy Technology**, 2 (2014) 574 -578.
- ❖ K. Anitha, R. Malinidevi, O. M. Kirthiga, L. Rajendran, Theoretical analysis of epidemic models with random coefficients, International Journal of Mathematical Archive, 5(4) (2014) 109-117.
- ❖ O. M. Kirthiga, L. Rajendran, Approximate analytical solution for non-linear reaction diffusion equations in a mono-enzymatic biosensor involving Michaelis– Menten kinetics, **Journal of Electroanalytical Chemistry**, 751 (2015) 119-127.
- ❖ O. M. Kirthiga, L. Rajendran, Analytical expression pertaining to the concentrations of biomass, sugar and ethanol production from wastewaters of the soft drink industries, International Journal of Modern Mathematical Sciences, 4 (3) (2016) 352-364.
- C. Thangapandi, O. M. Kirthiga, L. Rajendran, Analytical expressions of concentration of free bacteria and free phages, Global Journal of Mathematics and Mathematical Sciences, 3 (2) (2013) 67-77.

- ❖ O. M. Kirthiga, L. Rajendran, Mathematical model of cell growth for biofuel production under synthetic feedback, Natural Science, 6 (2014) 262-277.
- ❖ V. Meena, O. M. Kirthiga and L. Rajendran, Analytical expression of concentration of substrate in biofilm reactor using adomian decomposition method, Analytical and Bioanalytical Electrochemistry, 6 (6) (2014) 713-732.
- ❖ R. Malini Devi, **O. M. Kirthiga** and L. Rajendran, Analytical expression for the concentration of substrate and product in immobilized enzyme system in biofuel/biosensor, **Applied Mathematics**, 6 (2015) 1148-1160.
- ❖ O. M. Kirthiga, M. Sivasankari, R. Vellaiammal, L. Rajendran, Theoretical analysis of concentration of lactose in a packed bed reactor using immobilized β -Galactosidase, Ainshams Engineering Journal, 9(4)(2018) 1507-1512.
- ❖ O. M. Kirthiga, L. Rajendran, Kinetic mechanism for modelling of electrochemical mediated enzyme reactions and determination of enzyme kinetics parameters, Russian Journal of Electrochemistry, 54 (11) (2018) 783-795.

EXPERIENCE

- ❖ Worked as an Assistant professor in the Department of Mathematics with CA, Sourashtra College for Women, Pasumalai, Madurai during the academic year 2019 2020.
- ❖ Worked as an Assistant professor in the Department of Mathematics, The Madura College, Madurai during the academic year 2018 2019.
- ❖ 2013-2015, Junior research fellow in the Department of Science and Technology (DST) sponsored research project entitled "Mathematical modelling of non-linear reaction-diffusion processes and optimization of enzymatic biofuel cells" in Department of Mathematics, The Madura College, Madurai -11.
- ❖ Worked as an Assistant professor in the Department of Mathematics, Lady Doak College, Madurai during the academic year 2012 2013 (odd semester).

CAMPS, SEMINARS AND CONFERENCES ATTENDED

- ❖ Presented a paper at the National conference on "RECENT DEVELOPMENT IN MATHEMATICS AND ITS APPLICATION" organized by Department of Mathematics, The Madura College, Madurai, January 2015.
- ❖ Presented a paper at the National conference on "RECENT TRENDS IN APPLICABLE MATHEMATICS" organized by department of mathematics, Bharatha Matha College, Thrikkakara, Kochi, Kerala 2014.
- ❖ Presented a paper at the 18th National Convention of Electrochemists on "EMERGING TRENDS IN ELECTROCHEMICAL ENGINEERING, SCIENCE AND TECHNOLOGY" organized by Society for Advancement of Electrochemical Science and

- Technology, Karaikudi, CSIR-Central Electrochemical Research Institute, Karaikudi, School of Chemistry and Madurai Kamaraj University, Madurai 2014.
- ❖ Presented a paper at the National Conference on "ADVANCES AND APPLICATIONS IN MATHEMATICAL MODELLING" organized by Department of Mathematics, Bharathiyar University, Coimbatore 2014.
- ❖ Presented a paper at the CSIR sponsored International Conference on "MATHEMATICAL COMPUTATION AND MODELLING" organized by Department of Mathematics, The Madura College, Madurai, January 2014.
- ❖ Presented a paper at the DST & CSIR sponsored National Conference on "ADVANCES AND APPLICATIONS IN MATHEMATICAL MODELLING" organized by Department of Mathematics, The Madura College, Madurai, April 2013.
- ❖ UGC National Conference on "EMERGING TRENDS IN MODERN TOPOLOGY" organized by Department of Mathematics, Arul Anandar college, Karumathur, Madurai 2011.
- ❖ Attended 2 days "LEADERSHIP CAMP" in Lady Doak College, Madurai.

CONFERENCES ORGANISED

- ❖ DST sponsored National Conference on "Recent Development in Mathematics and its Applications" on 9th January 2015 at Department of Mathematics, The Madura College, Madurai-11.
- CSIR sponsored International Conference on "Mathematical Computation and modelling" on 6th January 2014 at Department of Mathematics, The Madura College, Madurai-11.

ACHIEVEMENTS

- ❖ Secured **Class First** in Linear Programming during V Semester in UG.
- Secured Class Second in Advanced Statistics during IV Semester in UG.
- Secured Class Third in Analysis during II Semester in UG.
- ❖ Actively learned Number Theory during III Semester in UG.
- ❖ Won **Second Prize** in Dumb Charades even organized by department.
- Participated in various department competitions.

CO-CURRICULAR ACTIVITES

- ❖ Active Tutor for UG students during 2011-2012
- Organized Quiz Competition event in Maths Carnival in 2011
- ❖ Department Club Secretary during 2008-2009.
- ❖ Active Class representative during 2007-2008
- ❖ Active participant in all seminars and conferences.

EXTRA CURRICULAR ACTIVITES

- NSS Volunteer during 2007-2009
- ❖ Participated in March Past Event during 2007-2010
- ❖ Library Volunteer during 2007-2010
- Secured Senior Grade Certificate in English Typewriting Course.

REFERENCES

1. Dr. L. Rajendran,

Professor (R&D),

Department of Mathematics,

Sethu Institute of Technology, Kariapatti - 625 115.

Mobile: +91- 9442228951 Email: dr.rajendran.l@gmail.com

2. Mrs. Felicia Shirley,

Associate Professor,

Department of Mathematics,

Lady Doak College, Madurai - 625 002

Mobile: +91 – 9442040448 Email: felicia_shirley@rediffmail.com

PERSONAL DETAILS

Father Name : O. K. Mothilal

Mother Name : O. M. Rajeswari

Husband Name : M.R.Prakash

Date of birth : 24.09.1990

Sex : Female

Marital status : Married

Nationality : Indian

Mother tongue : Sourashtra

Languages known : Sourashtra, Tamil, English

I hereby declare that all the above-mentioned particulars are true to the best of my knowledge.

Yours truly,

O.M. KIRTHIGA