- **\*** Kindly adhere to the below format for Uniformity.
- **Tabular format to be included, only in the specified place. In all the others, follow a write up in short.**

#### STAFF PROFILE

1) Name : Dr. K.Julia Rose Mary

2) Designation : Associate Prof of Mathematics

3) Department : P.G & Research Department of Mathematics

4) Qualification : M.Sc., M.Phil., Ph.D.

5) Experience : Teaching :26 Research : 21

6) Area of Specialization (s) : OPERATIONS RESEARCH

7) E-mail : juliakulandaisamy@gmail.com

8) Academic Qualifications: M.Sc., B.Ed.,, M.Phil., Ph.D.

9) Additional Qualifications:

Diploma/ Vocational/ Certification	Area of Spealization	Institution/ University/ Agency Name	Year
Post Graduate Diploma in Computer Applications	Computer Applications	Alagappa University Karaikudi	1992
Post Graduate Diploma in Operations Research	Operations Research	Pondicherry University Pondicherry	2004

## 10) Grants Received

<b>Event Title</b>	Agency	Amount	Date

# 11) Projects

# Completed

Project Title	Agency	Amount	Duration

# Ongoing

Project Title	Agency	Amount	Duration

#### 12) Research Guidance

Programme	No. of Scholars		
	Completed	Pursuing	
Ph. D.	-	5	
M. Phil.	21	1	

## 13) Research Publications

#### **International**

Author Name, Co-author Name, Title of the Paper, Journal Name (Year) Volume, Page No.

- [1] . K. Julia Rose Mary, M I. Afthab Begum, and S. Palaniammal "Unreliable M<sup>x</sup>/M/1 -N Policy with single vacation and start up time". Int. J. Comp. Math. Sci. App., (2008). Vol.2, No.3, July-September, pp (213-221).
- [2]. K. Julia Rose Mary and M.I. Afthab Begum "Steady State Analysis of an M<sup>x</sup>/G<sub>1</sub>G<sub>2</sub>/1 queue with N policy and setup time". Res. High. JADU., (2010)pp (2021-2032)
- [3]. K. Julia Rose Mary and M.I. Afthab Begaum "M<sup>x</sup>/M/1 queue with working vacation". Acta Ciencia Indica . (2010). Vol. XXXVIM, no.3 pp(429-439).
- [4]. K. Julia Rose Mary and M.I. Afthab Begum). "G1/M/1 queue with multiple working vacations". Karpagam IJAM. (2010). Vol 1, Issue 1, Apr' 10 Sep' 10 pp (31-38).
- [5]. K. Julia Rose Mary, M.I. Afthab Begum and Jemila Parveen "Bi-level threshold policy of M<sup>x</sup>/G<sub>1</sub>G<sub>2</sub>/1 queue with early setup and single vacation". Int. J. Operational Research. (IJOR). (2011). Vol. 10, No.4. 2011, pp(469-493).
- [6]. K.Julia Rose Mary and Afthab Begum .M.I "An optimum control of a batch arrival queue With second optional service and setup time under Bernoulli vacation schedule" American Journal of Mathematics and Science " Jan 2012 -Vol 1 –pp (211-216)
- [7]. K.Julia Rose Mary and C.Shanmuga Priya "Optimal policy of fuzzy  $M^x_{(m,N)}/G_{sos}/1$  multiple vacation queueing system" International Journal of Computer Applications- February (2014) Issue 4 Volume 1 ISSN :2250 1797
- [8]. K.Julia Rose Mary and T.Gokilavani "Cost Analysis of FM<sup>x</sup>/FM/1 Queueing system" International Journal of Computer Applications-February (2014 )Issue 4 Volume 1 ISSN :2250 1797
- [9]. K.Julia Rose Mary and T.Gokilavani "Analysis of Mx/M/1/MWV with fuzzy

- parameters" International Journal of Computer Applications- March April (2014) Issue 4 Volume 2 ISSN :2250 – 1797
- [10]. K.Julia Rose Mary and Angle Jenita .P "Optimal operating policy of FM<sup>X</sup>/ FM/1 multiple working vacation queueing system International Journal of Advanced and Innovative Research (2014) Vol 3- Issue 1 Page 292-299
- [11] K.Julia Rose Mary and Angle Jenita .P "Second optional service Queueing model with Fuzzy parameters – International Journal of Applied Engineering and Technology- 2014 Vol4 Issue (1) pp 46-53
- [12] K.Julia Rose Mary and Angle Jenita .P , Fuzzy cost analysis of  $M^x/G_1G_2/1/MV$  Queueing model, International journal of Advanced and Innovative Research 2014 , vol3 Issue 8 pp 56-62
- [13] K.Julia Rose Mary, P.Monica and S.Mythili,"Performance Measure of FM/FM/1 queueing system with N-policy", International journal of physics and Mathematical Sciences, 2014 Vol(4) Issue 3, pp 10-15
- [14]. K.Julia Rose Mary and G.Majula Christina Analysis of fuzzy working vacations queueing models using DSW ,2015, Algorithm International journal of Advanced and Innovative Research Vol4 Issue (1) 116-119
- [15] K.Julia Rose Mary and G.Majula Christina ,DSW Algorithm for FM(X)/FM/1 single working vacation queueing model International journal of Advanced and Innovative Research, 2015, vol 3 , Issue 8
- [16] K.Julia Rose Mary and J.Pavithra Analysis of FM/FM(a,b)/1/MWV Queueing model, International Journal of Innovative Research Science Engineering and Technology (IJIRSET) (2016), Vol 5 Issue 2 pp (1391-1397)
- [17] K.Julia Rose Mary, R.Rajalakshmi and J.Pavithra, Analysis of FM/FM(a,b)/1/MWV/Br Queueing model, International Journal of Innovative Research Science Engineering and Technology (IJIRSET) (2016), Vol 142 Issue 11 pp (18-22)
- [19] K.Julia Rose Mary, S.Vinnarasi and J.Maria Remona, Unreliable batch arrival queueing system with SWV IJIRSET(2016), Vol 5 Issue 2 pp(2884-2889)
- [20] K.Julia Rose Mary, R.Rajalakshmi and J.Pavithra, Steady state Analysis of m/M(a,b)/1

- MWV queieng model IJIRSET (2016), Vol 5 Issue 2 pp (2890-2895)
- [21] K.Julia Rose Mary, JM.Remona and R.Rajalakshmi Analysis of M/M(a,b)/1/MWV /Br Queueing model, International Journal of Computer Applications (2016)Vol(141) Issue(7) May Pp(1-4)
- [22] K. Julia Rose Mary and G.Majula Christina ,Analysis of total average cost for MX(m,N)/M/1/BD/MV with fuzzy parameters using robust Ranking Techniques, International Journal of Computer Applications 2015,vol (121) Issue (24) pp (1-4)
- [23]K.Julia Rose Mary and R.Rajalakshmi, M/M/C:N/FIFO Queuing Analysis for patient flow in hospital, International Journal for Research in Applied Science and Engineering Technology, Aug 2017, Vol 5,Issue 8 Pp(2163-2169)
- [24] K.Julia Rose Mary and R.Rajalakshmi, Fuzzy analysis for M/M/C finite capacity queuing model, International Journal of Applied Research, Aug 2017 Vol 3,Issue 9 pp( 103-106)
- [25]. K. Julia Rose Mary and Kavitha. G ,Fractal representation of chronic myeloid leukemia Global Journal of Pure and Applied Mathematics ,2017 Volume 13, Number 6
- [26]. Priyadarshini Infanta and K.Julia Rose Mary and, A study of structural changes of Airway in Human Asthma using Fractal Dimension, Global Journal of Pure and Applied Mathematics. (2017) Volume 13, Number 6
- [27] K. Julia Rose Mary ,G. Kavitha, C. Priyadharshini Infanta ,A Relationship between Insulin and Insulin Receptors on Adipose Tissue with M/M/C model, International Journal of Pure and Applied Mathematics International Journal of Pure and Applied Mathematics 2018, Volume 119 No. 16, 641-653.
- [28].K. Julia Rose Mary and J. Christy Jenifer, Drugs to cure Eosinophil syndrome under Transient state and steady state, International Journal of Research in Engineering, Science and Management (2018), Vol 1, Issue -10, pp (627-630)
- [29].K.Julia Rose Mary and J. Christy Jenifer, Effects of Dopamine Receptors in drugs under Transient state and steady state, International Journal of Research in Engineering, Science and Management (2018), Vol 1, Issue -10, pp (611-614)
- [30]. Vyshna Unni and K. Julia Rose Mary and, Queuing systems with c servers under differentiated type 1 and type 2 vacations (2019), Infokara Research vol 8, pp 809-819
- [31] Vyshna Unni and K. Julia Rose Mary and, M/M/1 multiple vacations queuing systems with differentiated vacations under mixed strategy customers, AIP conference Proceedings 2020,

- [32]. Kavitha .G Priyadarshini Infanta and K.Julia Rose Mary , A relation between Insulin and insulin receptors on Adipose tissue with M/M/c model, International Journal of Pure and Applied Maths , (2018) Vol 119 Issue (16) pp 641-653
- [33]. Priyadarshini Infanta Kavitha. G and K.Julia Rose Mary Modelling optimum number of Insulin Receptors in the Hepatic cell using Queueing theory, International Journal of Innovation in Science and Maths, 2018, Vol 6, Issue 4, pp(125-128)
- [34].Deepa.M and K.Julia Rose Mary, Heterogenous arrival fluid model driven by an M/M/1 Queue with exponential vacations subject to catastrophes, International Journal of analytical and experimental modal analysis, 2020, Vol XII, Issue X, pp (855-862)
- [35] Priyadarshini Infanta .C and K.Julia Rose Mary, Transient Analysis of M/M/C queue with multiple vacations and customers impatience under restricted admissibility, Alochana chakara Journal, 2020, Vol IX, Issue VIII pp(499 -505)
- [36] Monica Celin and K.Julia Rose Mary, Multi person decision making in fuzzy environment for Obesity, Infokera Research, 2020, Vol,9, Issue 1, pp(301-305)
- [37].U.Felicia and K.Julia Rose Mary, A study of Stationary analysis of an M/M/1 fluid queue subject to balking and breakdown, Infokera Research, 2019, Vol 8, Issue 8, pp(430 -433)
- [38].Kavitha.G and K.Julia Rose Mary, Transient solution of M/M/C model for unreliable server with catastrophes under restricted admissibility, Journal of Information and computer science, 2019, Vol 9, Issue 11, pp (423-427)
- [39].C.Priyadarshini Infanta and K.Julia Rose Mary, Transient Analysis of M/M/c queue with multiple working vacations and customers impatience, The International Journal of Analytical and Experimental modal analysis, 2019, Vol XI, Issue X, pp(2991-2998)
- [40].C.Priyadarshini Infanta and K.Julia Rose May , Transient analysis of M/M/C with balking and vacation,2020,International Journal of Research and Analytical Review, Special Issue pp(31-35)
- [41]. Kavitha.G and K.Julia Rose May ,Transient solution of M/M/C Queueing model for Heterogenous servers with catastrophes and balking , 2020,International Journal of Research and Analytical Review, Special Issue pp(36-40)
- [42]. Vyshna Unni and K.Julia Rose Mary Queueing Systems with Multiple Servers under

- Differentiated Working Vacations, International Journal of Research in Advent Technology April 2019 Vol. 7, Issue 4,page no: 392-396,
- [43]. Vyshna Unni and K.Julia Rose Mary ,Evaluation of Queueing Systems for C Servers under Multiple Differentiated Vacations and with Partial Vacation Interruptions, International Journal of Advance and Innovative Research, June 2019Vol. 6, Issue 2, Page NO:170-177,
- [44]. K.Julia Rose Mary ,Detailed study of Pearson Correlation and Cross correlation for Face Recognition" in the International Journal of Analytical and Experimental Modal Analysis Oct 2020, Vol XII, Issue X

#### **National**

#### 14) Other Publications

- ➤ K. Julia Rose Mary and M.I. Afthab Begum. "Unreliable Bulk Queue with Single Vacation and An Early Setup time". Proceedings: ICOREM. Anna University. Trichy. May, 27<sup>th</sup> -29<sup>th</sup>. (2009), 1186-1195.
- ➤ K. Julia Rose Mary and M.I. Afthab Begum. "Closed form Analytical Solution of the General Bulk service Queueing Model M/M(A,B)/1 under Working Vacation". Proceedings of Mathematical and Computational Models: Recent Trends. International Conference on Mathematical and Computational models, PSG College of Technology, December, 21<sup>st</sup> -23<sup>rd</sup>. (2009), 92-100.
- ➤ K. Julia Rose Mary, M.I. Afthab Begum, M. Jemila Parveen. "M/M/1 Queue with Working Vacation". Proceedings of Mathematical and Computational Models: Recent Trends. International Conference on Mathematical and Computational models, PSG College of Technology, December, 21<sup>st</sup> -23<sup>rd</sup>. (2009), 92-100.
- ➤ K. Julia Rose Mary and M.I. Afthab Begum "An optimum control of batch arrival queueuing system with S.O.S and setup time under Bernoullivacation schedule "National Conference In Recent frontier in Applied dynamical system at Karunya University on Jan 21& 22 2011
- ➤ K. Julia Rose Mary and M.I. Afthab Begum "The (m,N) policy of single server Batch arrival Queueing system with S.O.S under (m,N) policy and single Benoulli vacation, International Conference on Mathematical and computational model on 2011, Dec 19-21 at PSG Tech"-

- ➤ K. Julia Rose Mary and M.I. Afthab Begum. The (m,N) policy of single server batch arrival Queueing system with multiple vacations and break downs under restricted admissibility" "International conference on "Maathematics and its applications A new wave (ICMANW 2011) held on 21<sup>st</sup> 22<sup>nd</sup> Dec 2011 at Avinashilingam University
- ➤ K.Julia Rose Mary and D.Victor Arokia Doss, Modeling of CREB pathway induced gene induction: from stimulation to repression, 19<sup>th</sup> International conference on Matematical Biology, Barcelona-Spain May26th and 27<sup>th</sup> 2017, pp (2972-2976)
- ➤ D.Victor Arokia Doss, Soundarya.K and K.Julia Rose Mary Evaluation of serine and branched chain amino acid levels in depression and the beneficial effects of exercise in rats, 19<sup>th</sup> International conference on Matematical Biology, Barcelona-Spain May26th and 27<sup>th</sup> 2017, pp (2967-2971)

#### 15) Book Publications

#### 16) Consultancy

Nature of Consultancy	Client	Amount	Completion Status

## 17) Presentations in Conference

#### **International**

- ➤ K. Julia Rose Mary and M.I. Afthab Begum. "Unreliable Bulk Queue with Single Vacation and An Early Setup time". Proceedings: ICOREM. Anna University. Trichy. May, 27<sup>th</sup> -29<sup>th</sup>. (2009),
- ➤ K. Julia Rose Mary and M.I. Afthab Begum. "Closed form Analytical Solution of the General Bulk service Queueing Model M/M(A,B)/1 under Working Vacation". Proceedings of Mathematical and Computational Models: Recent Trends. International Conference on Mathematical and Computational models, PSG College of Technology, December, 21<sup>st</sup> -23<sup>rd</sup>. (2009),
- ➤ K. Julia Rose Mary, M.I. Afthab Begum, M. Jemila Parveen. "M/M/1 Queue with Working Vacation". Proceedings of Mathematical and Computational Models: Recent Trends. International Conference on Mathematical and Computational models, PSG College of

- Technology, December, 21st -23rd. (2009),
- ➤ K. Julia Rose Mary and M.I. Afthab Begum "The (m,N) policy of single server Batch arrival Queueing system with S.O.S under (m,N) policy and single Benoulli vacation, International Conference on Mathematical and computational model on 2011, Dec 19-21 at PSG Tech"-
- ➤ K. Julia Rose Mary and M.I. Afthab Begum. The (m,N) policy of single server batch arrival Queueing system with multiple vacations and break downs under restricted admissibility" "International conference on "Maathematics and its applications A new wave (ICMANW 2011) held on 21<sup>st</sup> 22<sup>nd</sup> Dec 2011 at Avinashilingam University
- ➤ K.Julia Rose Mary and D.Victor Arokia Doss, Modeling of CREB pathway induced gene induction: from stimulation to repression, 19<sup>th</sup> International conference on Matematical Biology, Barcelona-Spain May26th and 27<sup>th</sup> 2017
- ➤ D.Victor Arokia Doss, Soundarya.K and K.Julia Rose Mary Evaluation of serine and branched chain amino acid levels in depression and the beneficial effects of exercise in rats, 19<sup>th</sup> International conference on Matematical Biology, Barcelona-Spain May26th and 27<sup>th</sup> 2017

## **National**

- K.Julia Rose Mary and M.I. Afthab Begum The (m,N) policy of single server batch arrival queueingSystem with multiple vacations and break downs on Scientific computing and applied mathematics at V.L.B. Janakiammal Engineering College, Coimbatore on 29.06.2011
- ➤ K. Julia Rose Mary and M.I. Afthab Begum "An optimum control of batch arrival queueuing system with S.O.S and setup time under Bernoulli vacation schedule "National Conference in Recent frontier in Applied dynamical system at Karunya University on Jan 21& 22 2011

## 18) Participation in Conference

- ➤ ICOREM. Anna University. Trichy. May, 27<sup>th</sup> -29<sup>th</sup>. (2009),
- ➤ Recent Trends International Conference on Mathematical and Computational models, PSG College of Technology, December, 21<sup>st</sup> -23<sup>rd</sup>. (2009),
- National Conference In Recent frontier in Applied dynamical system at Karunya University

- on Jan 21& 22 2011
- ➤ International Conference on Mathematical and computational model on 2011, Dec 19-21 at PSG Tech"-
- ➤ Mathematics and its applications A new wave (ICMANW -2011) held on 21<sup>st</sup> 22<sup>nd</sup> Dec 2011 at Avinashilingam University
- ➤ 19<sup>th</sup> International conference on Mathematical Biology, Barcelona-Spain May26th and 27<sup>th</sup> 2017

## 19) Participation in Seminar

- Proprietation techniques & its applications at Srisakthi Institute of Engineering at 7.12.2007
- Scientific computing and applied mathematics.L.B. Janakiammal Engineering College, Coimbatore on 29.06.2011 &30.06.2011

# 20) Participation in Workshop

- Workshop on "Revised Guide lines for the Accreditation Process of NAAC "on 22.02.2020
- ➤ Workshop on "Revised Guide lines for the Accreditation Process of NAAC "on 07.03.2020
- ➤ Workshop on "Innovative Eco systems, Incubation centres and start-ups for higher education Institutions on 19.03.2020
- 21) Participation in Orientation Programme/ Induction Programme/ Short term Courses
- ➤ 45<sup>th</sup> Orientation Course conducted by Bharathiar University from 30.010.2001 to 26.11.2001
- Refresher course in Environmental studies conducted by Bharathiar University from 15.10.2004 to 04.11.2004
- Refresher course in Mathematics conducted by Bharathiar University 16.01.2007 to 21.02.2007
- Refresher course in Algebra conducted by Academic staff college Madras University 05.11.2009 to 26.11.2009

- 22) Participation in Faculty Development Programme
- Finishing school carrier advancement programe Coimbatore Instituete of Management on 14.05.2008 to 16.05.2008
- ➤ Faculty Development Programme in LINUX at Dept of Mathematics Nirmala college for women on 31.01.2018

## 23) Conference/ Seminar/ Workshop Organized

- Workshop on Operations Research and its applications on 2.12.10 & 3.12.10
- Trends and Challenges in Mathematical Modelling on 05.01.2018
- A New Cognitive approach to real life problems via Mathematics on 05.12.2019
- Partial Differential Equations Theory and Application on 25.05.2020 and 26.05.2020

# 24) Invited Speaker/ Session Chair – Conference/ Seminar/ Workshop

- ➤ R.V.S College of arts and science on Markovian batch arrival queueing system with bilevel control policy under server vacation and break down on 07.02.2012
- > Sri Narayana guru College of Arts and science on An optimum control of a batch arrival queueing system with S.O.S under Bernoulli vacation schedule on 07.08.2011
- ➤ SNMV College of arts and Science delivered a lecture on Application of Mathematics on 11.2.2013
- As a subject expert for selecting lecturers at Sri Narayanaguru College on 30.5.2013
- R.V.S. College of Arts and Science Analysis of Working vacation policy at R.V.S on 6.9.14
- ➤ Chair person 19<sup>th</sup> International conference on Matematical Biology, Barcelona-Spain on 26.05.2017
- M.Phil Viva-voce Examiner Avinashilingam University, Coimbatore ON 18.09.2017
- ➤ Delivered Guest Lecture on Queuing theory at PSGR Krishnammal College, Coimbatore on 11.01.2018
- ➤ Project Viva-Voce examiner at R.V.S. College of Arts and Science on 02.04.2018
- ➤ Delivered Guest Lecture on Applications of Queuing theory at KG College of Arts and Science, Coimbatore on 27.02.2019
- Member of the Permanent Affiliation Inspection Commission, Government arts and science

- college, Kangeyam, on 27.08.2019
- ➤ Delivered guest lecture on Queuing models at self financing campus Avinashilingam University, Coimbatore On 20.02.2020
- ➤ Delivered a lecture in the webinar on the topic of Queuing strategy an overview at Nehru Arts and Science college on 13.05.2020
- ➤ Convenor of the Continuous Affiliation Inspection Commission P.S.G College of Arts and Science on 18.08.2020
- ➤ Delivered Expert conversation on Optimization techniques at Kumaraguru college of Arts and Scinece on 11.09.2020
- ➤ Mentored the faculties of the Erode Christian college for criteria III on 25.02.2020
- ➤ Mentored the faculties of the A.G College of Arts and Science Tirupur for criteria III on 28.02.2020
- ➤ Mentored the faculties of the Keepyee college of Arts and Science, Kothari for criteria III on 29.02.2020
- ➤ Mentored the faculties of the Angappa college Coimbatore for criteria III on 03.03.2020
- Mentored the faculties of the Bishop Ambrose college Coimbatore for criteria III on 4.03.2020

## 25) Member in Board of Study

Board member in Rathinam College of Arts and Science

- For 2019 -2020 Board of studies conducted on 22.11.2019
- ➤ For 2020-2021 Board of studies conducted on 09.07.2020

#### 26) Editorial/Review Board Member

## 27) Membership in Professional Bodies

Name of Professional Body	Nature of Membership	Duration
Mathematics Teacher	Life member	
Association		