# **CURRICULUM VITAE**

#### RAHUL R.

Assistant Professor Department of Mathematics BMS College of Engineering Bull Temple Road, Bengaluru-560 019



## **Residential Address:**

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# **PERSONAL PROFILE:**

Date of Birth : 06<sup>th</sup> October 1985 Father's name : Ramananda V.

Mother's name : Radhika R

Gender : Male

**Nationality** : Indian

: Kannada, English, Hindi, Konkani,

Languages Known Marathi, Tulu, Telugu.

Interests : TEACHING and RESEARCH

**EDUCATION:** 

Ph.D., --- IIT ROORKEE(Pursuing) 2016-2019

**Title of Thesis: Mathematical Modeling of Drug Delivery** 

**Through Drug Eluting Stent** 

M.Sc., --- Bangalore University --- 2006-2008---First Class

B.Sc., --- Bangalore University --- 2003-2006---First Class

### **WORK EXPIRENCE:**

Working as Assistant Professor, in the Department of Mathematics, BMS College of Engineering since 09<sup>th</sup> September 2008 to till date

### **SUBJECT TAUGHT WITH SPECIALIZATION:**

- 1. Engineering Mathematics- I and II
- 2. Engineering Mathematics- III and IV
- 3. Higher Engineering Mathematics- I and II
- 4. Linear Algebra
- 5. Discrete Mathematical Structures
- 6. Graph theory.
- 7. Number Theory.

#### **AWARDS/ HONORS:**

Secured First prize in "Three-day special science lectures series in Mathematics" organized by the Department of Mathematics, Bangalore University, Bangalore during February 27-29, 2008.

#### **VISITS ABROAD:**

Stefan Banach International Mathematical Center, Poland, during June16th to June 22<sup>nd</sup>, 2019.

#### **RESEARCH INTERESTS:**

- i. Heat and Mass Transfer
- ii. Drug Delivery
- iii. Drug Eluting Stents
- iv. Mathematical Modeling.

### **MSc Dissertation/Phase Shift**

- 1. The thesis entitled "Mathematical Modeling of Drug Dynamics in Coating through Drug Eluting Stent with the effect of solubilisation and recrystalization of drug" submitted by Swati Kumari under the supervision of Dr.Pratibha and Rahul R.
- 2. The thesis entitled "Analysis of Mass Transfer in Stent based Drug Delivery" submitted by Vandan chauhan under the supervision of Dr.Pratibha and Rahul R.
- 3. Demonstrated a physical Model of Brachistochrone Problem in Phase shift 2015 at BMS College of Engineering , Bangalore-19

#### **RESEARCH PUBLICATIONS:**

- 1. The paper entitled "Analysis of Drug Transport Through Drug Elutes Stents" has been accepted in International Journal of Mathematical Bio Sciences
- 2. The paper entitled "Analytical study of drug release from micro particles with combined effects of solubilisation and Recrystallisation in Stent Based Drug Delivery" has been accepted in International Journal of Dynamics and Control.
- 3. The paper entitled "Analytical Model of Mass Transfer with Solubilization limit: An Application to Drug Eluting Stent" has been accepted in International Journal of Mathematical Bio Sciences.
- 4. Communicated the paper entitled "Mathematical Modelling of drug release from stents under the influence of solid-liquid mass transfer" in International Journal of Biomathematics.
- 5. Communicated the paper "Analysis of Multi-layer porous wall Model: An Application to Drug Eluting Stents" in International Journal of Biomathematics.

# INTERNATIONAL AND NATIONAL CONFERENCE

- 1. Presented the paper entitled "Mathematical Modelling of Advection Diffusion Mass Transfer with Application to Stent Based Drug Delivery" at International Conference on Mathematical Modelling And Computations in Bio Systems held during 12<sup>th</sup> -14<sup>th</sup> March, 2018, at IIT Roorkee, Roorkee, India.
- 2. Presented the paper entitled "Mathematical Modelling of Drug Transport through Drug Eluted Stents" at International Conference on Applied And Computational Mathematics held during 23<sup>rd</sup> -25<sup>th</sup> November, 2018, at IIT Kharagpur, Kharagpur, India.

3. Presented the paper "Comparative Study of Mass Transfer through Two Layer Porous Media with application to Drug Eluting Stent" at "International Conference on Mathematical Methods and Models in BioSciences (BIOMATH 2019)" held during 16<sup>th</sup>-22<sup>nd</sup> June 2019 at Bedlewo, Poland.

# **Workshop Attended**

- 1. Faculty development program on "Teaching Learning Method" held during 2th 7th August 2010, at B.M.S. College of Engineering, India.
- 2. Three Day Workshop on "Linear Algebra and its Applications to Engineering", held during 16th and 18th January, 2012 by the Department of Mathematics, M.S.Ramaiah Institute of Technology, Bangalore, India.
- **3.** TEQUIP-II Sponsored Faculty Development program on, "Biostatistics-Statistical Analysis through Software Tools" during 11th 16th February 2013, organised by the Department of Mathematics, at B.M.S. College of Engineering, India.
- **4.** MHRD-AICTE Sponsored Faculty Development programme on Workshop on "Linear Algebra and Applications" held during 7th— 13th July 2013 at National Institute of Technology, Calicut, India.
- 5. TEQUIP-II Sponsored Quality Improvement program on "Advanced Linear Algebra and its Applications to Engineering" held during 17th–20th July, 2013 at M.S.Ramaiah Institute of Technology, Bangalore, India.
- **6.** TEQUIP-II Sponsored One day Workshop on "Identification of Slow Learners and Performance Enhancement" on 20th August, 2013 at B.M.S. College of Engineering, India.
- **7.** TEQUIP-II Sponsored Quality Improvement program on "Biostatistics and Biomodelling using Software Tools" held during 22nd 26th July, 2013 at B.M.S. College of Engineering, India.
- **8.** TEQUIP-II Sponsored Quality Improvement program on "Latex and Excel for Research-Hands on Sessions" held during 2nd -7th August, 2013 at B.M.S. College of Engineering, India.

- **9.** MHRD Sponsored Workshop on "How to use A-VIEW", conducted at B.M.S. College of Engineering, India.
- **10.**TEQUIP-II Sponsored Quality Improvement program on "SciLab for Engineering Applications" held during 01<sup>st</sup> -03<sup>rd</sup> January, 2014 at R.V College of Engineering, India.
- **11.**TEQUIP-II Sponsored Quality Improvement program on "Intelligent Machines and Systems" held during 20<sup>th</sup> -24<sup>th</sup> January, 2014 at B.M.S. College of Engineering, India.
- **12.**TEQUIP-II Sponsored Quality Improvement program on "Linear Algebra and its Applications" held during 16<sup>th</sup> -20<sup>th</sup> June, 2014 at B.M.S. College of Engineering, India.
- **13.**TEQUIP-II Sponsored Quality Improvement program on "Modeling Using Microsoft Office Excel" held during 21<sup>st</sup> -25<sup>th</sup> July, 2014 at B.M.S. College of Engineering, India.
- 14. Attended one day Workshop on "Numerical Modelling of Transport Phenomenon in Fluid Flows for Engineering Applications" organized by Department of Mathematics, IIT Roorkee on February 18<sup>th</sup> 2017.
- 15.Attended QIP Short-term Course on "Finite Element Methods for Engineering Applications" held during 12<sup>th</sup>-16<sup>th</sup> June2017, at IIT Roorkee, Roorkee, India.
- 16.Attended QIP Short-term Course on "Computational Methods in Fluid Mechanics and Heat transfer" held during 19<sup>th</sup>-23<sup>rd</sup> February 2018, at IIT Roorkee, Roorkee, India.
- 17. Attended QIP Short-term Course on "Probability Theory and its Applications to Problems in Engineering" held during 04<sup>th</sup>-15<sup>th</sup> June2018, at IIT Roorkee, Roorkee, India.

- 18.Attended AICTE-QIP Short-term Course on "Bio- Electric Signals and Medical Imaging: Post Processing & Clinical Application" during 26<sup>th</sup> February 2019 to 08<sup>th</sup> March 2019, at MITS Gwalior, India.
- 19.Attended QIP Short-term Course on "Applications of Computational Techniques in Engineering Using MATLAB" held during 03<sup>rd</sup>-07<sup>th</sup> June2019, at IIT Roorkee, Roorkee, India.
- **20.**One-Week ISTE-BMSCE Sponsered Faculty Development Programme on "Contact and Non-Contact Measurements" held during 22<sup>nd</sup> -27<sup>th</sup> July, 2019 at B.M.S. College of Engineering, India.

# **MOOC COURSES ATTENDED:**

- 1. Life Skills for Engineers(Level I) Offered jointly by the commonwealth Educational Media Centre for Asia and University of Hyderabad from May 15<sup>th</sup> to June 28<sup>th</sup>, 2018.
- 2. Life Skills for Engineers (Level II) Offered jointly by the commonwealth Educational Media Centre for Asia and University of Hyderabad from November 06<sup>th</sup> to December22<sup>nd</sup>, 2018.
- 3. Successfully Completed the MOOC Course "Life Skills for Engineering Level I and II" With distinction.

### **WORKSHOPS CONDUCTED**

Organized a TEQIP Sponsored One week workshop on Linear Algebra and its application, during 16<sup>th</sup>-20th June, 2014 at BMS College of Engineering.