

# CURRICULUM VITAE



**Name & Designation** : **DR. RAMA BHARGAVA**  
**Professor**

**Date of Birth** : 01-09-1955

**Present Address** : Department of Mathematics, I.I.T. Roorkee, Uttarakhand  
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**Present Post** : **Professor, Department of Mathematics**  
**Dean Administration,**  
Indian Institute of Technology Roorkee, Roorkee

**Broad Field** : **Mathematics and Computer Applications**

**Field of Specialization** : Computational Fluid Dynamics, Finite Element,  
**/ Interest** Meshfree methods, Computer Graphics.

## **Academic Qualifications (High School onwards):**

Degree	Univ./Board	Year	%age	Distinction
High School	UP Board	1969	I – 71 %	-
Intermediate	UP Board	1971	I – 70%	National Scholarship
B. Sc.	Meerut University	1973	I – 88 %	VII <sup>th</sup> Rank in the University
M. Sc.	University of Roorkee	1975	I – 93 %	Topped all PG Students and won Chancellor's Gold Medal and six other Medals
PhD	Do	1978	-	-

**Research Experience** : 37Years

**Teaching Experience** : UG classes – 39Years.  
PG classes – 37 Years. (M.Sc., MCA, M.Tech.) with experience on teaching vast variety of courses.

**Short Term Courses Conducted** : Course on Numerical Analysis and Computer Application for Teachers of various Colleges.

**Present Research activities** : Supervising three students for Ph. D. on **Computational fluid dynamics** and one on **large processing**.

## **Courses Developed :**

1. Discrete Mathematical Structures for UG & PG classes.
2. Finite Element Method for UG classes.
3. Computer Graphics & Discrete Mathematics for MCA classes.

**Passion:**

- (i) For developing awareness and implementing mathematics for society and other disciplines.
- (ii) For enhancing the technical education any women.
- (iii) For developing a rationale for interdisciplinary research.

**NATIONAL AND INTERNATIONAL AWARDS**

1. Was awarded **INSA EXCHANGE AWARD** for UK 2009-10
2. Was awarded **AUSTRALIAN ENDEAVOUR EXECUTIVE AWARD** in 2008-09.
3. In 2001, was awarded **Khosla Silver medal** by IIT, Roorkee on two research papers.
4. In 2000 and 2007, was considered as **International women of the year**.
5. In 1983, was awarded **DAAD SCHOLARSHIP** for pursuing research in Institute for stromugsmechnic DFVLR-AVA Gottingen, Germany.
6. In 1979, was selected for “**INDIAN ADMINISTRATIVE SERVICES**”.
7. **In M.Sc. (At University of Roorkee)**
  - a) **CHANCELLOR’S GOLD MEDAL** for Best Student in M.Sc./M.Tech.
  - b) Dr. G. Pande **Silver** medal for best Girl student in M.Sc./M.Tech.
  - c) University **Gold** medal for standing first in class.
  - d) A. N. Khosla **Gold** Medal for getting maximum marks in M.Sc./M.Tech. courses.
  - e) G. Pande **Silver** medal for getting maximum marks in M.Sc./M.Tech. previous exam.
8. **In B.Sc. (Meerut University)**
  - a) VII<sup>th</sup> Rank in the University.
  - b) Bursary scholarship holder.
  - c) Topped in College and won many Gold medals.
9. **National Scholarship** holder

**ADMINISTRATIVE ACHIEVEMENTS**

1. Member of **Board of Governors**, IIT Roorkee from 1.01.2014 to 31.12.2015.
2. Member of the Institute Finance Committee IIT Roorkee till 2016.
3. **Ex Head, QIP Centre IIT Roorkee from 2012 to 2014.**
4. **Ex Head of the Department of Mathematics** from 1.1.2009 -31<sup>st</sup> Dec. 2011.
5. **Chairperson** of International Conference on Advances in Modeling, Optimization and Computing to be held at IIT Roorkee, Dec 5- 7, 2011.
6. **Chairperson** of the DST Sponsored National meet of Research Scholars from 19th-23rd Dec. 2009.
7. **Chairperson** of SGMIP 2009 at IIT Roorkee from 16<sup>th</sup>-21<sup>st</sup> March 2009 with OCCAM UK.
8. **Chairperson** of the National conference on Biomechanics at IIT Roorkee from 7-8<sup>th</sup> March 2009.
9. **Organizing Secretary** of the INDO AUSTRALIAN WORKSHOP on CFD to be held at IIT Roorkee 12-14<sup>th</sup> April 2007.
10. **Organized a session as CO CHAIR** on Micropolar flows and Applications in 15<sup>th</sup> International Conference of Mechanics in Medicine and Biology at **Singapore** in Dec. 2006.

11. **Chairperson** of Research Committee(DRC) at the Deptt (March 2006-2008).
12. **Organizing Secretary** of 71<sup>st</sup> Conference of Indian Mathematical Society at IIT Roorkee in Dec. 2005.
13. **Chairperson** Undergraduate Committee (DUGC) from 2004-2006.

## **OTHER ACHIEVEMENTS**

1. Visited Zurich, Switzerland in September 2016 and presented a paper obtaining best paper onward.
2. Visited Toronto and MUN St. Johns for presentation and interaction in June 2014.
3. Visited USA in July 2011 in connection with technical discussion and **chairing a session at Las Vegas.**
4. Member of the committee of **AICTE** for up gradation of Syllabi for Vocational education (2011).
5. Visited **San Francisco USA** from Oct 9-10, 2009 for presenting the paper.
6. Visited **MIT USA** from June 12<sup>th</sup> – 15<sup>th</sup> 2007 for presenting a research paper and discussion.
7. Was awarded a project from **ISRO** for three years starting from March 2007 worth Rs 11.15 Lakhs.
8. Visited **Munich Germany** in Aug 2006 to present a paper in 5<sup>th</sup> world congress in biomechanics.
9. Visited **AUSTRALIA** for presenting paper in 5<sup>th</sup> International congress on Industrial and Applied Mathematics in July 2003.
10. Represented IIT ROORKEE in the five nations Partnership Programme at **INDONESIA** in 2002 in INDUSTRIAL MATHEMATICS.
11. Being paper setter of many national entrance examinations of various services including **IAS and Public Service commissions.**
12. Published more than 140 research papers in international journals and conferences.
13. Member of **BOS** and other committees of Many Universities/Institutes.
14. Already guided 14 students for Ph.D. and 70 students for PG projects/ dissertations.
15. Working in Collaboration with **Prof. O.A. Beg, University of Sheffield, UK.**
16. **Member of North zone library committee of NBHM.**

## **PROJECTS**

1. One minor research project completed--- sponsored by UGC.
2. One project entitled 3-D reconstruction for City modeling completed- sponsored by ISRO, SAC, 2011 as PI.
3. One project on '3D Reconstruction and Software Development for city model generation from Satellite Images' completed by SERB, SAC Ahmedabad (2013) as Co-PI.
4. One project on 'FE modeling and Symbolic Computations' sponsored by DST (2014) as PI (Ongoing).

## SOME SPECIAL LECTURES

1. Role of Mathematics in scientific research—Keynote lecture
2. Exploring the potential of Mathematics---- through the Society for Promotion of Science and Technology.
3. Computing Mathematics- Past and Present-- as Keynote **speaker**.
4. **P L Bhatnagar award lecture in IMS in December 2011.**
5. Meshfree methods: A New Computational Approach --- Keynote lecture.
6. Computational Fluid Dynamics- a present scenario--- Keynote lecture.
7. Delivered many Keynote and Plenary talks in many International Conference.