



1. **Name** : Dr. Stephen P.A.A. Dias Barreto
2. **Date of Birth**: 25/8/1965
3. **Educational Qualification**
 - Ph.D. (Mathematics)
 - M.Sc (Mathematics)
 - B.Sc (Mathematics)
4. **Work Experience**
 - Teaching - 7.5 yrs
 - Research - 1.5 yrs
 - Industry-
 - Others -
5. **Area of Specializations** - Mathematics (Operator Algebras and Applications to Statistical Mechanics, in particular quantum spin systems)
6. **Subjects teaching at Under Graduate Level**- Applied Mathematics-III, Applied Mathematics-IV, Discrete Mathematical Structures, Numerical Techniques and Computer Programming, Probability Theory and Random Processes and Operations Research
7. **Post Graduate Level**- Computer Mathematics
8. **Research guidance** : Nil
9. **Currently doing Ph.D.** : NA
10. **No. of papers published in**
 - National Journals (1)
 - International Journals (3)

Workshops/Conferences attended:

1. “**Quantum disordered systems**” , International Conference : “Quantum Probability, Information and Control Symposium (QPICS) 15-22 July, 2006 at the University of Nottingham.
2. “**Some topics on quantum disordered systems**”, International conference on **Operator Theory and Operator Algebras-III**, organized jointly by Indian Statistical Institute and Department of Mathematics, IISc,, at IISc Bangalore, from December 19-22, 2005.
3. “**Borchers Spectrum of Disordered Systems**”, International Conference on

4. **Operator Theory , Non- Commutative Geometry and Quantum Probability**, held at ISI Kolkata from December 20 – 22 , 2004
 5. “**On the Structure of KMS States of Disordered Systems**” (Poster), **Joint India-AMS (American Mathematical Society), Mathematics Meeting**, held at the J. N. Tata Auditorium, IISc, Bangalore, from 17th to 20th of December, 2003.
 6. “**Arveson Spectrum of a Random Evolution**” International workshop on “**Classical and Non-Commutative Probability**” organized by the University of Greifswald, Greifswald, Germany, from 27th to 28th of June 2000.
 7. “ **A quantum Spin System with Random Interactions**”, International conference on “**Quantum Probability and Infinite Dimensional Analysis (QP-IDA)**” organized by Indian Statistical Institute and Jawaharlal Nehru Centre for Advanced Scientific Research, in Bangalore, from 14th to 18th of December, 1999
 8. Workshop on “**Ergodic theory and Von Neumann Algebras**” from December 3- 13, 2007 at the Erwin Schrödinger International Institute for Mathematical Physics in Vienna-Austria.
 9. Conference on “**Quantum Probability, Information and Control Symposium**” (QPICS), 15 – 22 July 2006, at the University of Nottingham.
 10. International conference on “**Operator Theory and Operator Algebras-III**”, organized jointly by Indian Statistical Institute and Department of Mathematics. IISc, at Bangalore, from December 9-22, 2005.
 11. International Conference on “**Operator Theory, Non Commutative Geometry and Quantum Probability**” held at ISI, Kolkata, in December 2004.
 12. Joint India - AMS (American Mathematical Society) meeting held at IISc, Bangalore, December 2003.
 13. Workshop on “**Recent Advances in Operator Theory and Operator Algebras – II**”, conducted by the Indian Statistical Institute, Bangalore Centre, from 24th December 2001 to 4th January 2002.
 14. A talk on “**Quest for Unification**”, by Fields Medalist Prof. Edward Witten, Institute for Advanced Studies, Princeton, USA at the J. N. Tata Auditorium, IISc, Bangalore organized by the Indian Academy of Sciences on 11th January 2001.
 15. International Conference on “**Spectral and Inverse Spectral Problems for Schrodinger Operators**” organized jointly by Institute of Mathematical Sciences, Chennai and Department of Mathematics, Goa University from 13th to 16th December 2000 in Goa.
 16. International Workshop on “**Classical and Non-Commutative Probability**” organized by the University of Greifswald, Germany on 27th and 28th June 2000.
 17. International Conference on “**Quantum Probability and Infinite Dimensional Analysis (QP-IDA)**” organized by Indian Statistical Institute and Jawaharlal Nehru Centre for Advanced Scientific Research in Bangalore from 14th to 18th December 1999
11. Projects Carried out – **One (Tensor product Systems of Hilbert Modules) (DST – DAAD Project)**
 12. *Patents*- Nil

13. *Technology Transfer* – Nil

14. *Research Publications* – Six (4 published & 2 preprints)

1. S.D. Barreto, and F. Fidaleo: "**Some topics in quantum disordered systems**", "Atti del Seminario Matematico e Fisico, dell' Universita di Modena e Reggio Emilia, LIII, 215-234 (2005)
2. S.D. Barreto and F. Fidaleo: "**On the Structure of KMS States of Disordered Systems**", Commun. Math. Phys. 250 (2004), 1-21.
3. S.D. Barreto, Rajarama Bhat, Volkmar Liebscher and Micheal Skeide: "**Type I Product Systems of Hilbert Modules**", Journal of Functional Analysis 212 (2004), 121-181.
4. S.D. Barreto: "**A Quantum Spin System with Random interactions I**", Proc. Indian Acad. Sci. (Math. Sci.) 110 (2000), 347-356.
5. S. D. Barreto: "**A quantum spin system with random interactions II**", Goa University Preprint, April 1998
6. S. D. Barreto "**A note on uniqueness of the kms state for a quantum spin system on an infinite graph**", Goa University Preprint, May 1996

15. *No. of Books published with details* - Nil



Name : **Mr. Vikas Venkat Bhujle**

Date of Birth: **30/12/1955**

Educational Qualification

B.Ed.

M Sc. (Physics)

Work Experience

Teaching - 24 yrs

Research - 4 yrs

Industry-

Others -

Area of Specializations - Physics
Subjects teaching at Under Graduate Level-
Post Graduate Level- Nil

Research guidance

Currently doing Phd : No.

No. of papers published in

Masters's

-

National Journals

Ph.D.

-

International Journals

Conferences : four

Projects Carried out - One

Patents- Nil

Technology Transfer - Nil

Research Publications - Nil

No. of Books published with details - Nil

Name : Mr. Adarsh Kumar Handa
Date of Birth: 23/6/1972
Educational Qualification
M.Sc. (Applied Mathematics)
M Phil (Mathematics)
Qualified GATE 2001 with 88 percentile.



Work Experience

Teaching - 9 yrs

Research -

Industry-

Others -

Area of Specializations - Mathematics(Applied)

Subjects teaching at Under Graduate Level-

| COURSE | SEMESTER/BRANCH | TOPICS COVERED |
|----------------------------------|---|---|
| Applied Mathematics -1 | Sem-I (B.E. Programme in Comp. Engg, B. E. in Electronics and Telecommunication Engg. B. E. in Mech. Engg. And B.E in Information technology) | Beta and Gamma functions, Complex Numbers and Analytic functions, Successive Derivatives, Taylers Series, Partial derivatives , Maxima and Minima of functions of two variables. |
| Applied Mathematics-II | Sem-II (B.E. Programme in Comp. Engg, B. E. in Electronics and Telecommunication Engg. B. E. in Mech. Engg. And B.E in Information technology) | Derivative under integral sign, Rectification of the plane curves, Double and triple integrals with their applications, Vector calculus ,Differential equations of first order and first degree, Linear differential equations with constant coefficient. |
| Discrete Mathematical Structures | Sem III (B.E. Programme in Information Technology) and Sem IV (B. E. in Comp. Engg.) | Relations and Functions, Propositional calculus, Boolean algebra, Monoids, Groups, Rings, Fields, Vector Spaces, Graph Theory, Introduction to Languages and Finite State Machines. |

| COURSE | SEMESTER/BRANCH | TOPICS COVERED |
|---|--|--|
| Numerical Techniques and Computer Programming | Sem. IV (B.E. Programme in Comp. Engg, B. E. in Electronics and Telecommunication Engg., B. E. in Mech. Engg. & B. E. in Information Technology) | Errors and approximations, Solution of Transcendental and polynomial equations, Iterative and Analytical Methods for solution of System of linear Equations, Interpolation Theory, Numerical Differentiation Integration & Solution of Differential Equations. |
| Applied Mathematics IV | Sem IV (B.E. Programme in Electronics and Telecommunication Engg.) | Complex variable Theory and Study of Special Functions – Bessel Functions and Legendre Polynomials & Boundary Value problems related to a vibrating membrane. |
| Applied mathematics III | Sem III (B.E. Programme in Comp. Engg, B. E. in Electronics and Telecommunication Engg. & B. E. in Mech. Engg.) | Matrix Theory, System of Linear Equations, Linear Algebra, Fourier Series, Fourier Transforms and Applications, Laplace Transforms and applications, Z-transform and its Applications to Difference Equations, Derivation and Solution of the Wave Equation and Diffusion Equation and Probability Theory. |

Post Graduate Level- Nil

Research guidance

Currently doing Phd : Yes

No. of papers published in

Masters's - National Journals
 Ph.D. - International Journals

Conferences /Short term Courses::

- Attended international conference of American Mathematical Society held at IISC Bangalore.
- Attended one week course on Technical Teachers Training conducted by TTTI Bhopal.

- Attended international Conference/workshop on Operator Algebra and Quantum probability at ISI Calcutta
- Attended two weeks Training Programme on Discrete Mathematics at MANIT Bhopal.
- Attended two weeks training Programme on Entrepreneur Development ship sponsored by DST at Agnel Charities Complex Verna,
- Attended advanced instructional School on Algebraic topology at ISI Kolkutta from 5th Dec to 31 Dec 2005
- Attended two weeks workshop/conference on “Geometric Methods in Topology” At IISC Bangalore on 12th June 2006.

Projects Carried out - Nil

Patents- Nil

Technology Transfer - Nil

Research Publications - Nil

No. of Books published with details - Nil



Name : Mrs. Maria Alzira Cesaria Xavier

Date of Birth: 5/11/1980

Educational Qualification: MBA (Finance), B.E. (ETC)

Work Experience:

Teaching - 2 years and 10 months

(Lecturer with additional duties of Assistant Training and Placement Officer)

Area of Specializations: Finance

Subjects teaching at Under Graduate Level:

- Economics and Management --- Third Year Computer Engineering
- Management and Economics --- Second Year ETC Engineering
- Engineering Economics and Management --- Third Year Mechanical Engineering
- Principles of Economics and Management --- Third Year Information Technology

Conferences :

- Attended a four day National Seminar, from 18th to 21st December 2005, on “**Responsible Citizenship for National Regeneration**” organized by Agnel Seva Ashram and Dharma Bharati Foundation at Fr. Agnel Technical Education Complex, Vashi, Navi Mumbai.
- Attended a workshop on “**Six Sigma with Stress Management**”, at NITTTR, Porvorim from 27th November to 1st December, 2006.
- Attended “**CASTALIA – The Fountain of Inspiration**” an International Conference on “**Retaining Talent**” organized by Goa Institute of Management at Majorda Beach Resort, Gao on the 11th and 12th August 2007.
- Attended “**SAMRIDDHI-Financing India’s Development**” a two day National Level Finance Conference organized by Goa Institute of Management in collaboration with Confederation of Indian Industry (CII), Goa Council at Club Mahindra on 8th and 9th September 2007.
- Attended a workshop on “**Environment Education**” organized by the Directorate of Higher Education – Govt. of Goa, Centre for Environmental Education –Porvorim, Govt. College of Arts, Science and Commerce – Quepem and Biodiversity Research Cell – Carmel College at the Conference Hall, Goa University, on the 31st August 2007 and 1st September 2007.
- Attended a one day seminar on “**Seeding Research- Opportunites and Challenges**” organized by Goa University, National Institute of Oceanography (NIO), Goa Chamber of Commerce and Industry (GCCCI) at NIO Auditorium on the 27th October 2007.



Name : **Ms. Salima Kothare**

Date of Birth: **9/2/1978**

Educational Qualification

M.A.

B.A.

SET

Pursuing PG program in Human Rights.

Work Experience

Teaching - 4 yrs

Research -

Industry-

Others -

Area of Specializations:

Subjects teaching at Under Graduate Level- Communication Skills, Social Science

Post Graduate Level-

Research guidance

Currently doing Phd : No.

No. of papers published in

Masters' s

- National Journals

Ph.D.

- International Journals

Conferences : Nine

Projects Carried out -

Patents- Nil

Technology Transfer - Nil

Research Publications - Nil

No. of Books published with details - Nil



Name : **Mrs. Cynthia Noronha Pereira**

Date of Birth: **3rd April, 1972**

Educational Qualification

M.Sc. (Physical Chemistry)

Work Experience

Teaching - 7.5 yrs

Research -

Industry- 2 yrs

Others -

Area of Specializations - Chemistry

Subjects teaching at Under Graduate Level-

Post Graduate Level-

Research guidance

Currently doing Phd : No.

No. of papers published in

Masters' s

-

National Journals

Ph.D.

-

International Journals

Conferences :

Projects Carried out - Nil

Patents- Nil

Technology Transfer - Nil

Research Publications - Nil

No. of Books published with details - Nil

FACULTY PROFILE

For each faculty give a page covering

1. Name: Heramb B. Aiya
2. Data of Birth: 17/04/1983
3. Educational Qualification:
M.Sc. in Mathematics.
4. Work Experience
 - Teaching: 5 months in PES college Farmagudi- Ponda- Goa.
 - Research
 - Industry
 - Others
5. Area of Specialization
6. Subjects teaching at Under Graduate Level: Applied Mathematics-II, Numerical Methods.
Post Graduate Level:
7. Research guidance
 - No. of papers published in Master's Ph.D.
 - National Journals
 - International Journals
 - Conferences
8. Projects Carried out
9. Patents
10. Technology Transfer
11. Research Publications
12. No. of Books published with details

