

## CURRICULUM VITAE

**Dr. Judith Maria Braganca**

*Assistant Professor*

Department of Biological Sciences

BITS Pilani, K K Birla Goa Campus

NH 17B, Zuarinagar, Goa – 403 726

Email: [jbraganca@yahoo.com](mailto:jbraganca@yahoo.com); [judith@goa.bits-pilani.ac.in](mailto:judith@goa.bits-pilani.ac.in)

Phone No: 0832-2580305    Mobile: 9325048518



### Personal Information

**Name** : Dr. Judith Maria Braganca  
**Date of Birth** : 2nd September 1976, F  
**Nationality** : Indian  
**Marital Status** : Married

### Education (Starting from Graduation onwards):

Degree	Institution/ Board	Year of Passing	Result
<b>B.Sc Chemistry &amp; Microbiology</b>	Goa University	April 1996	First Class
<b>M.Sc Microbiology</b>	Goa University	April 1998	A Grade
<b>S.E.T Life Sciences</b>	Pune University	February 2001	Eligible for Lectureship.

<b>PhD Microbiology</b>	Goa University	August 2003	-----

#### Details of professional training and research experience.

Name of Employer	Date of joining	Date of leaving	Designation
Goa University	January 1999	December 2000	Research Fellowship
CSIR-SRF Goa University	January 2001	May 2003	Senior Research Fellow

#### Details of employment (past & present).

Name of Employer	Date of joining	Date of leaving	Designation
Dhempe College, Goa	June 2003	July 2004	Lecturer in Biotechnology
BITS Pilani, Goa Campus	July 2004	December 2005	Lecturer in Biological Sciences
BITS Pilani, K K Birla Goa Campus	January 2006	Till date	Assistant Professor in Biological Sciences.

#### Peer Reviewed Publications:

- 1) B. B. Salgaonkar, K. Mani and **Judith M. Braganca**. (2013) *Accumulation of polyhydroxy alkanoates by halophilic archaea isolated from traditional solar salterns of India*. 17:787-795 **Extremophiles** DOI 10.1007/s00792-013-0561-5
- 2) P. Srivastava, **Judith M. Braganca**, S. Roy Ramanan and Meenal Kowshik (2013) *Synthesis of silver nanoparticles using haloarchaeal isolate Halococcus salifodinae BK3*. **Extremophiles** DOI 10.1007/s00792-013-0563-3
- 3) **Judith M. Braganca** and I. Furtado (2013). *Resistance of Halobacterium strain R1 to cadmium during growth in mineral salts medium devoid of growth factors*. **Asian Jr of Microbiol. Biotech. Env. Sc.** 15(2): 299-302

- 4) B. B. Salgaonkar, K. Mani and **Judith M. Braganca**. (2013) *Characterization of polyhydroxyalkanoates accumulated by a moderately halophilic salt pan isolate Bacillus megaterium strain H16*. **Journal of Applied Microbiology** 114, 1347—1356 doi:10.1111/jam.12135
- 5) Kabilan M, Bhakti Salgaonkar, Deepthi Das and **Judith M. Braganca** (2012). *Community solar salt production in Goa, India*. **BMC Aquatic Biosystems**. 8:30 doi:10.1186/2046-9063-8-30
- 6) Kabilan M, Bhakti Salgaonkar and **Judith M. Braganca** (2012). *Culturable halophilic archaea at the initial and crystallization stages of salt production in a natural solar saltern of Goa, India*. **BMC Aquatic Biosystems** 2012, 8:15 doi:10.1186/2046-9063-8-15.
- 7) B. B. Salgaonkar, K. Mani, A. Nair, S. Gangadharan and **J. M. Braganca**. (2012) *Interspecific Interactions among Members of Family Halobacteriaceae from Natural Solar Salterns*. **Probiotics & Antimicro. Prot.** DOI: 10.1007/s12602-012-9097-8
- 8) B. B. Salgaonkar, M. Kabilan and **J. M. Braganca** (2011). *Sensitivity of Haloarchaea to Eubacterial Pigments Produced by Pseudomonas aeruginosa SB1*. **World J Microbiol Biotechnol**. 27(4): 799-804 DOI 10.1007/s11274-010-0519-z
- 9) **Judith M. Braganca** and Irene Furtado (2009). *Haloarchaea associated with salt crystals obtained from solar salterns of Goa, India*. Visual Image, Microbe Library.org. **American Society for Microbiology**.
- 10) **Judith M. Braganca** and Irene Furtado (2009) *Isolation and characterization of Haloarchaea from low salinity Coastal sediments and waters of Goa – India*. **Current Science** 96(9): 1182 – 1184
- 11) S. Gayathri and **Judith M. Braganca** (2009). *Biosensors for monitoring environmental pollutants: A review* . **Environmental Science: An Indian Journal**.5(9).

#### **Book Chapter:**

**1) Chapter 6:** Molecular Microbial Ecology of Solar Salterns of Goa and the Isolation of Culturable Haloarchaea by Kabilan M., B. B. Salgaonkar and **Judith M. Braganca**. In **Microbial Diversity and Its Applications**. Edited by Barbudde, S.B.,R.Ramesh & N.P.Singh New India Publishing Agency.

## Conferences

- 1) B.B. Salgaonkar, Kabilan M. and **J.M. Braganca** (2013) Resistance of extremely halophilic archaea to metals. International Conference “**Halophiles 2013**’ at University of Connecticut, Storrs, USA in June 2013. [Poster]
- 2) Isha Kalra, Deepthi Das and **J. M. Braganca** (2013) Isolation and characterization of hydrolytic enzyme producing *Halogeometricum* sp. E3. International Conference “Halophiles 2013’ at University of Connecticut, Storrs, USA in June 2013. [Poster]
- 3) **B.B. Salgaonkar**, Kabilan M. and **J.M. Braganca** (2012) Accumulation of Polyhydroxybutyrate by Halophiles from Solar Salterns of India. 9<sup>th</sup> Extremophiles 2012, 10 -13 September, Sevilla, Spain.[Poster]
- 4) **Kabilan M.**, B.B.Salgaonkar and **J.M. Braganca** (2012) Culturable Haloarchaeal Diversity in Solar Salterns of Goa, India. 9<sup>th</sup> Extremophiles 2012, 10 -13 September, Sevilla, Spain. [Poster]
- 5) **Judith Braganca** and **U.Roy** (2012) Effect of Plastic Pollution in Marine Environments. UGC-SPONSORED NATIONAL SEMINAR TO SAVE MARINE ANIMALS FROM PLASTIC POLLUTION IN THE MARINE ENVIRONMENT. 20 -21 January 2012. Department of Chemistry, S.N.College, Rajkanika, Orissa. **[Oral Presentation]**
- 6) Kabilan M, Bhakti Salgaonkar and **Judith M.Braganca** (2011) Molecular Microbial Ecology Of Solar Salterns Of Goa And The Isolation Of Culturable Haloarchaea. *National Symposium on Microbial Diversity and its Applications in Health, Agriculture and Industry*. Organized by ICAR Research Complex for Goa, Ela, Old Goa, Goa- during 4th & 5th March, 2011. **[Oral Presentation]**
- 7) B. B. Salgaonkar, M. Kabilan and **J. M. Braganca** (2010). Biodiversity of Haloarchaea in hypersaline environments of Salt pans of Goa – India. 9<sup>th</sup> International Conference on Halophilic Microorganisms. 29<sup>th</sup> June to 3<sup>rd</sup> July 2010. Beijing, China. **[Poster]**
- 8) B. B. Salgaonkar and **Judith M. Braganca** (2009) *Characterisation of Extracellular Pigment produced by Pseudomonas species*. 50<sup>th</sup> Association of Microbiologists of India, National Chemical Laboratory. December 15–18, 2009. **[Poster]**
- 9) Kabilan M. and **Judith M. Braganca** (2008) *Screening of Haloarchaeal isolates for accumulation of polyhydroxyalkanoates*. 49<sup>th</sup> Association of Microbiologists of India, IIT Chennai. November 18 – 20, 2008. **[Poster]**

- 10) Hasina Begum, Kabilan M. and Judith M. Braganca (2008) *Isolation of Haloarchaea from Solar salterns and low salinity Coastal waters of Goa – India*. International Congress of Environmental Research. BITS – Pilani, Goa Campus, Zuari Nagar, Goa - 403726 (INDIA). December 18 – 20, 2008 [**Oral Presentation**]
- 11) Hasina Begum and Judith M. Braganca. (2007) *Isolation and Characterization of Haloarchaea from solar salterns of Tamil Nadu, India*. Association of Microbiologists of India, IIT Chennai. December 18 – 21, 2007. [**Poster**]
- 12) Judith M. Braganca and Irene Furtado (2006) *Microbial system for detection of Cadmium*. International Workshop on Biosensors for Environmental Analysis, BITS Pilani - Goa Campus, India in collaboration with Lund University, Sweden. 21-23 Feb, 2006 [**Poster**]

### **Books published**

- i) **Judith Braganca**, M. Kowshik and U. Roy. (2007) Laboratory Manual for Microbiology (BIO C 241). *Educational Development Division*. Birla Institute of Technology and Science, Pilani, Goa Campus. Revised 2012
- ii) Srikant Mutnuri, **Braganca J.** et al . (2007) Laboratory Manual for Measurement Techniques I (TAC C 211). *Educational Development Division*. Birla Institute of Technology and Science, Pilani, Goa Campus. Revised 2011

### **Professional recognition, awards, fellowships received:**

- i) CSIR Senior Research Fellowship January 2001 – May 2003.
- ii) BITS Pilani – University Immersion Scheme: Visited Goethe-University Frankfurt, Germany during June – July 2013 and worked with **Prof. Dr. Volker Muller**, Dept. of Molecular Microbiology & Bioenergetics, Biozentrum. Here I explored the cellular pools of compatible solutes in *Halobacillus halophilus*

### **Details of the research funding received**

- 1) Principal Investigator, UGC sponsored project “Studies of Haloarchaea producing polyhydroxyalkanoates” (2009-2012) No 34-500/2008

2) Principal Investigator, BITS Seed Grant Project “Screening and Characterization of Hydrolytic enzymes from Halophilic archaea having biotechnological potential” (2013-2015)

### **Research Guidance**

#### **PhD. Thesis Supervision Ongoing**

Bhakti B. Salgaonkar (Sep 2009- Present) - Biotechnological Application of Products from Culturable Halophilic Bacteria and Archaea Isolated from Solar Salterns.

Kabilan Mani (August 2010- Present) - Microbial Diversity of Halophilic Archaea and Bacteria in Solar Salterns and Screening for production of Antimicrobial/ Antiarchaeal Substances.

Deepthi Das (August 2012- Present) - Screening and Characterization of Hydrolytic enzymes from Halophilic archaea having biotechnological potential.

#### **ME Thesis Supervised**

Kabilan Mani (May 2010) - Isolation of Haloarchaea Producing Pigments.

Deepthi Das (May 2012) - A Study of the Photo Protective Effects of Haloarchaeal Pigments Against UV- Rays on Human Keratinocyte (*Hacat*) Cell Line.

#### **MSc Thesis Supervised**

Adit Chaudhary (May 2012) - Metal Tolerance in Archaea.

Isha Kalra (May 2013) - Evaluation of extremozymes from halophilic archaea

### **Teaching and Pedagogy**

**First Degree Courses taught:** General Biology, Microbiology, Ecology Immunology, Instrumental Methods of Analysis, Biology Project Laboratory, Measurement Techniques 1, Biology Laboratory

**Higher Degree Courses taught:** Molecular Immunology, Microbial Fermentation Technology

**Project Based Courses taught:** Laboratory Oriented Project, Study Oriented Project, Computer Oriented Project, Professional Practice, Research Projects, First Degree Thesis, Higher Degree Thesis

#### **Other Professional activities**

- Committee Member of the 63rd BRNS – INCAS National Workshop on ‘Radiochemistry and Applications of Radioisotopes in Science’. January 20 – 28, 2007
- Committee Member of International Water Association’s international conference on “Microbes in Wastewater & Waste Treatment, Bioremediation and Energy Production”. January 24 – 27, 2011 at Birla Institute of Technology and Science – Pilani, Goa campus, Goa, India.
- Committee Member of American Society for Microbiology sponsored International Workshop on Bioremediation. Jan 4 – Jan 16<sup>th</sup> 2010
- Committee Member of Conference on Anaerobic Digestion and Renewable Energy through Microbes Jan 13 – 15 2009
- Reviewer of for reputed journals of Springers, FEMS and Elsevier.
- Mentor for PS I

#### **Administrative and Institutional Contribution**

- i) Involved in designing and teaching of new courses for ME Biotechnology Advanced and Applied Microbiology and MSc Microbiology
- ii) Committee member Cross-campus Departmental Committee for Academics on a 2 year term.
- iii) Committee Member Standing Committee for Students Discipline.
- iv) Coordinator Media Relations and Genesis for K K Birla Goa Campus.
- v) Chief Coordinator from the Goa Campus for the launching of the BITS Pilani New website.
- vi) Managing the website on a day to day basis.
- vii) Started BITSCAN at the Goa Campus in the year 2010 and it continues to be the only magazine of the Institute to present the various events every semester. Running its 7th Issue.

### **Member of Professional Societies**

- American Society for Microbiology (ASM)
- International Society for Salt Lake Research (ISSLR)
- Association of Microbiologists of India (AMI)

**20<sup>th</sup> August 2013**

**Dr. Judith M. Braganca**



