Dr. J. ISHWARA BHAT

1. Name : Dr. J. Ishwara Bhat
2. Qualification : M.Sc., Ph.D.
3. Designation /Department : Professor, Department of Chemistry
4. Name of the Institution : Mangalore University, Mangalagangothri
5. Father's Name : Sri. J. Krishna Bhat
6. Date and Place of Birth : 4-10-1956, Jathi, Bayar (Kerala, India)
7. Nationality : Indian
8. Address :

Official	Residential
Professor of Chemistry Mangalore University Mangalagangothri Mangalore -574199 Karnataka, INDIA Phone: (0824) 2287 262 e.mail: bhatij@Yahoo.com	Jathi Nivas Bharath Nagar Iddya, SURATKAL Mangalore- 575 014 Karnataka, INDIA Phone: (0824) 2476 298 Mobile-9448409998

9. Educational Qualifications (From Degree Level):

Course	College/School	University	Class obtained	Year of passing
B.Sc. (P.C.M)	St. Aloysius College, Mangalore	Mysore	1st Class (70%)	April 1978
M.Sc Chemistry	Manasagangothri, Mysore	Mysore	1st Class 66%	April 1980
Specilisation :	*Physical Chemistry*			
Ph.D-Chemistry (Physical)	Mangalgangothri Mangalore	Mangalore	------	August 1998

Title of the Ph.D. Thesis : Kinetic & Mechanistic Investigations with Positive Halogens in Liquid Phase. (***Research Guide:*** *Prof. B. Thimme Gowda)*

10. Appointment/Teaching :

Total teaching Experience : 33 years

	Name of the Institution	Position held	Period From	To
1.	S.V.S College, Bantwal	Lecturer	02-07-1980	13-10-1980
2.	Govinda Dasa College, Suratka, Mangalore-14	Lecturer	15-10-1980	27-04-1989
3.	Karnataka Regional Engineering College, Suratkal (Present NITK) . Mangalore-14	Sr. Lecturer	28-04-1989	01-04-1989
4.	Dept. of Chemistry, Mangalore University, Mangalagangothri	Sr. Lecturer	02-08-1989	14-10-1993
5.	Dept. of Chemistry, Mangalore University, Mangalagangothri	Reader	15-10-1993	31-12-2002
6.	Dept. of Chemistry, Mangalore University, Mangalagangothri	Professor	14-10-2001	Till date

Date of Appointment as Lecturer :02-7-1980
i) in Mangalore University :02-8-1989
ii) As **Professor** :14-10-2001

Subjects taught/teaching at M.Phil and M.Sc. level

i) Electrochemistry;
ii) Chemical Kinetics
iii) Thermodynamics;
iv) Surface Chemistry,
v) Spectroscopy and Solid State Chemistry.

11. Research Activities:

Research experience : 25 yrs

A). Research Areas of Interest –

i)Solvation dynamics ii) Reaction dynamics iii)Corrosion and Catalytic Studies

B). Research Publications

Published : 79 (14 -International)
Presented in Seminars/Conferences : 65 (15 -International)

C): Research Projects handled -

1. Council of Scientific and Industrial Research **(CSIR) Junior Research Fellowship in 1980**.Ref: No-7/119 (174)/ 80-81 EMR-1 dt. Jan 1981 for 2 years (But could not avail the Fellowship).

2. **University Grants Commission** (UGC), New Delhi **Minor Research Project** in 1984.Ref. No- F-25, G. 1/202/84.SR. 1V dt. 21-1 -1984 (Under Financial Assistance To Teachers in the Universities and Colleges for undertaking Minor Research Project in Science).

3. **Mangalore University Minor Research Project** in **1992**. For research in Science and humanity, Ref. No- MU/Gen / 60/90-91/G.dt.21-2-92.

4. **University Grants Commission** (UGC), New Delhi- **Major Research Project** in **1997**: Topic- Conductometric and Spectrophotometric Studies on Ion-Solvation of N-Haloimide Species under varying Conditions. Ref no: - F - 12 - 58/97 (SR-1) dt. 8 -7 - 1997.

5. **Commonwealth Research Fellowship,** jointly sponsored by the University Grants Commission (**UGC**), New Delhi and Association of Commonwealth Universities (**ACU**), London, for one year [Topic: Kinetic and Mechanistic Investigations on the Decomposition of some N-Nitroso-hydroxylamine compounds Spectrophotometrically]. The work was carried out in association with **Dr.H.Maskill, Chemistry Department, University of Newcastle upon Tyne, Newcastle upon Tyne, UK** from 1 October 1997 to 30 September 1998.

D*): Research Guidance of towards the Award of-*

1. M.Phil Degree - Five

	Name of the candidate	Title of the Dissertation	Ref. of Degree award
1	Ms P. Bindu	Conductometric Studies with Haloamine-T in Different solvents and their Mixtures.	Dec 1992:Mu/EXB/ E13/M.Phil/Chem./ 92-93 dt. 29.12.92
2	Ms C. B.Susha	Measurement and Analysis of Electrical Conductivity of Chloramine-B in different Solvent Mixtures between 283 & 313K.	Dec 1993: MU/EXB /E.13/M.Phil/Chem./ 93-94 dt 24.12.94.
3	Mr. T.P. Mohan	Conductometric Studies of Ion-solvent Interaction of $HClO_4$, $NaClO_4$ & $KClO_4$ in Water, DMF and Water-DMF mixtures between 283K to 313K.	March 1995:MU/ EXB /E.13/M.phil/ Chem./94-95 dt. 7.3.95.
4	Mr. S.G. Goankar	Studies on Ion-Solvent interaction of N-haloimides species in Partially Aqueous media.	Feb1996:MU/EXB/ E.13/M.Phil./Chem./ 95-96 dt. 2.2.96.
5	Mr. M.N. Manjunath	Studies on the Impact of Ion-Solvation on Conductance behaviour of Citric acid and Its salts in DMF and Water-DMF mixture.	March 1997: MU/ EXB/E.13/M.Phil./ Chem/.96-97 dt. 7.2.97

2. Ph.D. Degree: 8

Sl no	Name	Title	Date of award
1	Mrs. Susha C B	Solvation behavior of N-haloimide and perchlorate species in aqueous, partial aqueous and Non-aqueous media	MU/EXB/E-13/Ph.D./Chem./98-99 dt.06-03-2000
2	Mr. Shivakumar H R	Studies on the impact of ion-solvation on the conductivity behavior of potassium thiocyanate, tartaric acid and related species	MU/EXB/E-13/Ph.D./Chem./96-97 dt.21-7-2001
3	Mr. Shreevaraprasad N S	Studies on the impact of salvation on the transport behavior of N-haloimides	Mu/EXB/Ph.D./CHEM.///99-2000/E.13 dt.10-11-2003
4	Mrs. Shreelatha T N	Solvation behavior of Bismuth compounds as a function of dielectric constant	Mu/EXB/Ph.D./CHEM./99-2000/E.13 dt.27-11-2004

5	Mrs. N. V. Sabitha	Studies on the transport behavior of chloramines under varying conditions	Mu/EXB/Ph.D./CHEM.(258)/99-2000/E.13 dt.30-12-2004
6	Mr. Kishore Shetty M	An investigation on the solvation behavior of some medicinally important compounds using conductometric and ultrasonic principle	MU/EXB/Ph.D./CR.25/Chem./2004-05/E.13 dt.31-12-2012
7	Mr. M. N. Manjunatha	A study on the impact of dielectric constant on the solvation behavior of species of citric acid and its salts	MU/EXB/Ph.D./CR.89/Chem.(720)/2006-07/E.13 dt.5-4-2013
8	Mr. Vijaya D Alva	A study on the Corrosion Behavior of Different metals under varying conditions	MU/EXB/Ph.D./CR.73/Chem.(755)/2006-07/E.13 dt.10-9-2013

Presently six students are working on Synthesis and characterization of biological products and activated charcoal and their corrosion inhibition and adsorption characters.

E) : Invited Talk in Seminars/Conferences –

1. Delivered an Invited Talk on `The Theory of Solvation` at the National Seminar on Solution Chemistry at the Department of Chemistry, at the National seminar, which was organized by the **Utkal University, Bhubaneswar** during 27-29 January, 1997.
2. Delivered an invited talk on Ion-Solvation: A Modelistic Approach and Applications at the International conference on Biophysical Inorganic and Organic Chemistry During 26-30 August 2007 at the **Bharath University, Chennai**.
3. Delivered an Invited talk on "A Study on the Effect of Pyridine Carboxylic Acid Derivatives on the Corrosion of Aluminium in HCl Medium", J. Ishwara Bhat and Vijaya Deviprasad Alva, in 20th International conference on Physical Organic Chemistry- ICPOC- 20 at the **Dang A University, South Korea**, during 22-28 August 2010.
4. Delivered an invited talk at the 3-day International Conference on Recent Advances in Textile and Electrochemical Sciences 2013 (RATES 2013) held at the Department of Chemistry, **Alagappa University, Karaikudi** during 21-23 March, 2013. Title of the Talk- An investigation on the Corrosion Inhibition Characteristics of some heterocyclic compounds on Aluminum and mild Steel in Acidic medium.

12. Refresher Courses/ workshops attended : Six

Sl.No	Course attended	Sponsorer	Centre	Duration
1.	Winter School/ Workshop	Dept of Sci & Tech, New Delhi.	VHNSN College Virudhanagar	18-11-91 To 30-11-91.
2.	Refresher Course (An advanced course)	University Grants Comis- sion (UGC) New Delhi	Dept of IPC, I.I.Sc, Bangalore	23-2-92 To 8-3-92
3.	Workshop	IANCAS & Dept of Chemistry, Mangalore Univ.	Mangalore University	29-10-92 To 18-11-92
4.	Refresher Course	U G C, New Delhi.	App. Chemistry , Dept; Cochin University.	4-10-93 To 28-10-93.
5.	Refresher course	U G C, New Delhi.	Academic Staff college, Andhra University.	8-11-93 To 4-12-93.

6.	Refresher Course	U G C, New Delhi.	Department of Chemistry, Mang. University.	17-10-94 To 7-11-94.

13. Delivered Invited lectures for Refresher courses in Chemistry at-

Sl.No.	Name of the University	Topic	Period
1.	Cochin University of Science and Technology, Cochin-22	1.Eectrical Double layer 2.Ion-Solvation 3.Solvation number	January 1999.
2.	Mangalore University	1.Phase Rule 2.Double layer theory 3.Solvation dynamics	June 2000.
3.	Calicut University	1.Theory of Solvation 2.Modern theory of Corrosion.	August 2000
4.	Cochin University of Science and Technology, Cochin-22	1. Theory of Solvation. 2. Modern theory of 3. Corrosion.	October 2000.
5.	Mangalore University	1.Corrosion & its prevention. 2.Non-conventional Energy sources.	October 2001 March 2002
6.	Calicut University	1. Modern theory of Corrosion. 2. Solvation dynamics.	September 2001.
7.	Kerala University	1. Solution dynamics 2. Modern theory of Corrosion	November 2001.
8.	Kerala University	Theory and applications of Ion-solvation	18 February 2013
9.	Kerala University	Diffraction Techniques	9th March 2015

14. Membership of Professional Bodies -

i) Elected Associate member of Royal Academy of Science International Trust (RASIT), USA.
ii) Life member of Association of British Scholars, Mangalore Chapter.
iii) Life member of Indian Science Congress, Calcutta.(L 6611)
iv) Life member of Indian Association of Nuclear Chemists and ALLIED Scientists, Bombay.(LM 567)
v) Life member of Indian Chemical Society, Calcutta.(3866 (LM) 1993).
vi) Life member of Electrochemical Society of India, Bangalore.(LM 73)
vii) Life member of Society for Adv Electrochemical Sci & Tech, Karaikudy, India.(LF 613).
viii) Life member of Indian society for Electroanalytical Chemistry, Bombay.
ix) Life member of Indian Society for Electroanalytical Chemistry (ISEAC) C/o Fuel Chemistry Division, BARC, Bombay.

15. Editorial Board membership:

1. Journal of Electrochemical Society of India, Bangalore.
2. International Journal of Industrial Chemistry (IJIC) (Springer)
3. Indian Chemical society, Calcutta
4. American Chemical Science Journal, USA
5. Annual International Conference on Chemistry, Chemical Engineering and Chemical Process, Canada
6. Indian Academy of Sciences, Allahabad

16. Awards :

1. CSIR Junior Research Fellowship during 1980.
2. Recipient of **Commonwealth Research Fellowship** during 1997-98 and worked with Dr. H. Maskill of University of Newcastle upon Tyne, United Kingdom on "Kinetic and Mechanistic Investigations on the Decomposition of some N-Nitroso-hydroxylamine compounds Spectrophotometrically"

17. Visit Abroad –

i) **University of Newcastle upon Tyne, Newcastle upon Tyne, United Kingdon** during 1997 – 98 on account of Commonwealth Research Fellowship programme.

ii) **Tunisia** (North east Africa) during 17 – 20 April, 1998 for presenting paper on Future of Chemistry, which was organised by UNESCO and The Royal Academy of Science International Trust (RASIT)-United Nations Educational, Scientific & Cultural Organisation - sponsored the First International conference under the theme of **University Students Think The Unthinkable- Key to better Future**.(RASIT WORLD STUDENT LEAGUE, PO Box 1557, Rutherford NJ 07070 – USA)

iii) **Dang A University**, **South Korea**, during 22-28 August 2010 to deliver an Invited talk at the IOPAC international conference..

18. Extra Curricular Activities:

1. **Governing Council Member** of Sri Bharati College (SBC), Mangalore during 2001 2007- managed by Dharma Chakra Trust (R). Hosanagar, Shimoga. And presently a member of Academic Improvement committee.
2. **Executive Committee Member** of -
   - i) Association of British scholars (ABS), Bangalore Chapter.
   - ii) Mangalore Havyaka Sabha, Mangalore (R). a cultural association.
   - iii) Mangalore Mahanagara Mandala Parishat, Mangalore- a cultural association.
   - iv) Association of Small scale Industrialists in Mangalore.
   - v) Pradhan of Vidya Vibhag- of Havyaka Mandala, Mangalore, Managed by His Holiness Sri Raghaveshwara Bharati Swameeji, Hosanagar Matha
3. **Founder secretary** of -
   - i) Mangalore University College Chemistry Teachers Association during 1989-90.
   - ii) Bharati Education Trust (R), Mangalore.
   - iii) "Kalagi", Suratkal – a cultural association during 1888-89.
4. Member of the Faculty of Science and Technology, Mangalore University(2003 to 2011).
5. Chairman of Board of Studies of Bio Chemistry and Industrail chemisytry of mangalore University.
6. Member and Chairman of Board of Examiners of Mangalore University and other Universities in Kerala and Tamilnadu.
5. Participated in various national and International level seminars/conferences organized by UGC/DST/Universities etc. Attended different workshops and refresher courses and COSIP programs.
6. Attended a one-day workshop on Computers conducted by Pals Computers, Mangalore on 25.5.88.

7. Attended 3 days workshop on Futurology organised Jointly by DST, New Delhi and Mangalore University at Mangalore University Campus from 16 to 18th.Jan 1998.
8. Attended one day Users meet and Seminar on Remote Sensing Satellite Applications held on 30th May 1994 at Mangalore University, Mangalagangothri.
9. Participated in various Inter-collegiate Seminars and experimental demonstrations.
10. Attended an elementary course in Computer (FORTRAN) programming conducted under UGC, New Delhi sponsored COSIP at St. Aloysius College, Managalore during 1977-78.
11. Attended one day workshop on Environmental conservation on 4-12-99 at the College of Fisheries, Mangalore, which was organized by Association of British Scholars (ABS), Karnataka chapter, Mangalore Centre.
12. Attended one day seminar on Advances in Electrochemical Instrumentation and Impedance Spectroscopy on 23rd May 2007 at Hotel Bangalore International, which was organised by Micro Devices Metrohm Limitd, Bangalore.
12. Life member of Krishna Yaksha Sabha, a cultural Organisation..

19. The contribution to teaching/ academic environmental /institutional corporate life & extension:-

1. Took part in framing the M.Sc. course Syllabus.
2. Organized science exhibitions for the public and school children.
3. Arranged science seminars for college students.
4. Involved in starting an Educational Institution for under-graduate program and nominated as honorary Governing Council member of the college (Sri Bharati Institute of Applied sciences).
5. Founder Secretary of Mangalore University College Chemistry Teachers Association with the aim of arranging symposia, science exhibition and workshop for college teachers.

20. Field outreach activities:-

1. Actively engaged in Extra Curricular Activities, involving the youth of rural and semi-urban areas, creating awareness in the modern aspects of the Science and Education.
   a) Founder Secretary of the Bharati Education Trust ® -arranging Public speeches and contributing towards scholarships to the needy students.
   b) Worked as secretary of `Kaliji`, Suratkal, a cultural organisaition to impart the cultural knowledge among youth.
   c) Worked as a member of National Organization Committee in the National Seminar on Solution Chemistry during January 1997 and delivered an Invited Lecture, at the Department of Chemistry, Utkal University, Bhubaneswar.

21. Other academic contribution :-

Actively involved in –

(i) Framed the blow up of the syllabus, reading materials, practical notes etc.
(ii) Delivered scientific popular lectures for College and High School students,
(iii) Increasing the scientific temperament among school going students by linking science with historical aspects.
(iv) Board of Advisors for small scale Industries at Bykampady Industrial area, Mangalore
   - For setting up quality control laboratory
   - Giving guidance in analysis. Raw materials and finished products.

V) Instrumental in Starting 2 years M.Sc., Course in Industrial Chemistry during the year 2009.

22. Conference/workshop organized-

1.National conference on current Trends in Chemical Research(CTCR-2006), during 13-14 may 2006 (**Co- convener**).

2. Two day seminar on "Frontiers in Chemistry" in association with Jawaharalal Nehru Centre for Advanced Scientific Research, Bangalore, during 12 - 13 April, 2008 (**Coordinator**).

3. Three Day International Conference on "Frontiers in Chemical Research"ICFCR. during 29 - 31 December, 2008 (**Chairman**).

4. Two day Lecture workshop on "Advances in Chemical sciences" in association with Indian Academy of Sciences, Bangalore, Indian national science Academy, New Delhi and The National Academy of Sciences, Allahabad India. (as Chairman) during 4 - 5 April, 2009, (**Coordinator**).

5. Three Day International Conference on "Recent Advances in Industrial Electrochemical Science and Technology"ICRAIEST- during 5 - 7 November, 2009 (**Chairman**).

Important Publications of Dr J Ishwara Bhat

1. Mechanistic Investigation with Positive Halogens: Kinetics of Oxidation of Thiosemicarbazide in Perchloric acid medium (B.T.Gowda and J. Ishwara Bhat), Tetrahedron (UK), **43** (1987) 2119-2128.
2. Mechanistic Studies with positive Iodine: Kinetics of Oxidation of Thiocyanate Ion by Iodine monochloride and Aqueous Iodine in Perchloric acid medium (B.T.Gowda and J. Ishwara Bhat)., Int.J.Chem.Kinet.(USA),**21** (1988) 621-633.
3. Conductance Behaviour of Chloramine-T in Aqueous and non- Aqueous media at different Temperatures (J. Ishwara Bhat and P.Bindu), J. Electrochem Soc. India, **42(2)** (1993) 103-110.
4. Solvation Behavior of $HClO_4$, $NaClO_4$ and $KClO_4$ species under varying conditions (J. Ishwara Bhat, T.P.Mohan and C.B.Susha), *Indian J. Chem*., 35A (1996) 825-831
5. Acoustic and solvation behaviour of N-iodoacetamide in water+DMSO & water +CH_3CN, (J. Ishwara Bhat and Shreevaraprasad N.S), *Ind. J. Pure & Appl.Phys*., **41**(2003) 275-279.
6. Acoustic characteristics of sodium salt of N-Chloro-p-toluene sulphonamide in aqueous and binary aqueous media at 303K (J. Ishwara Bhat and N.V. Sabitha), *Ind. J. Chem*., 42A (2002) 520-525.
7. Acoustic properties of N-bromosuccinimide in water + dioxan and N-chlorosuccinimide in water + methanol/dioxan at 303K (J. Ishwara Bhat and Shree Varaprasad N S), ***Russian Journal of Physical Chemistry*, 79(5)** (2005) 697-703.
8. Effect of ethanol on the solvation behaviour of BiI_3 in acetonitrile, methanol and DMF as a function of temperature (J. Ishwara Bhat and Sreelatha T.N), ***J. Mol. Liquids, Elsevir Publication*, 116** (2005) 175-180 .
9. Ion Association and Solvation of Sulfathiazole Sodium in Aqueous and Partial Aqueous Media, J. Ishwara Bhat and M. Kishore Shetty**, *J. Chem. Eng. Data* (ACS publications)** *55* (2010), 4721–4724.
10. Study of aluminium corrosion inhibition in acid medium by an antiemetic drug, J. Ishwara Bhat and Vijay D. P. Alva*, Trans. Ind. Inst. Met.*,**(Springer) 64,** Aug-Oct.(4-5) (2011) 377-38.
11. Miconazole Nitrate as apotential corrosion Inhibitor for Aluminium in ydrochloric acid medium, J. Ishwara Bhat and Vijay D. P. Alva, *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry* (Taylor & Francis online), 42 **(7)** (2012) 951-957.

12. Inhibiting effect of Nicotonic Acid Hydrazide on Corrosion of Aluminium and Mild Steel in Acidic Medium, J. Ishwara Bhat and Vijay D. P. Alva, J. Kor. Chem. Soc., **58(1)** (2014) 1-7.