

## Curriculum vitae

**Dr. Mukula Shripad Joshi**  
**Assistant Professor,**  
**Department of Chemistry,**  
**PES' Modern College of Arts, Science and Commerce, Ganeshkhind,**  
**Pune-411016India.**

### Highlights

- 1) BRDS-DAE fellowship for Ph.D.
- 2) Worked as a Guest Scientist at Hahn-Meitner Institute, Berlin, Germany.
- 3) Instrumental in getting the preliminary data from Pune University LINAC Facility at National Centre for Free Radical Research, University of Pune,Pune, India.
- 4) Development of an aptitude test for the postgraduate students in Chemistry.
- 5) Life Member of Indian Society for Radiation and Photochemists (ISRAPS).
- 6) Recipient of Dr Hari Mohan Memorial Award.
- 7) Coordinator of Placement cell-Chemistry.
- 8) Co-ordinator of B.Sc. Blended program (Chemistry) . B.Sc. Blended is a three year degree program of Savitribai Phule Pune University, equivalent to the degree program of University of Melbourne, Australia. (Modern college is the first college in the entire nation implementing B.Sc. Blended in Chemistry).

## **Educational Qualification:**

M.Sc. (Physical Chemistry) from department of Chemistry University of Pune 1997-1999

B.Ed. (Science and Mathematics methods)      University of Pune      1999-2000

Ph.D. Chemistry      University of Pune      (NET/SET Exempted)      25<sup>th</sup> May 2006

Title of the thesis: Free Radical Chemistry of Ruthenium and Copper Polypyridyl Complexes: A Radiation Chemical Study.

Research guide:- Professor Dr B. S. M. Rao, Department of Chemistry, University of Pune (now Savitribai Phule Pune University), Pune-411007.

## **Teaching experience**

Working as an Assistant Professor in Progressive Education Society's Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016. Teaching Physical Chemistry to postgraduate and undergraduate level since 2006.

(Received BRNS-DAE Fellowship for Ph.D. during 2001-2006 hence left the college)

Worked as a lecturer in Chemistry in the same institute for undergraduate level in the academic year 2000-01.

Co-ordinator of B.Sc. Blended program (Chemistry) . B.Sc. Blended is a three year degree program of Savitribai Phule Pune University, equivalent to the degree program of University of Melbourne, Australia since 2019.

Five M.Sc. students have completed their projects at Chemistry Division, Bhabha Atomic Research Centre, Mumbai. During 2007-08

Placement cell coordinator(Chemistry) of the college since 2006

Member of IQAC of college in 2009

Member of UGC Coordination Committee of college in 2010-11

Member of Research Committee during 2009-11

Chairman of the Admission Committee of M.Sc. Organic Chemistry and B.Sc. Blended.

## Research Publications

- 1) Application of Vectors on the Miscibility of the Substances, Mukula S. Joshi, Swati M. Kandharkar, Kalyani Bhat, *The Pharma Innovation*, 2017, 7(1), 142-144  
Online ISSN: 2277-7695, Print ISSN: 2349-8242 NAAS rating 5.03
- 2) Higher antioxidant property in decoction than raw fruit parts of *Langenaria Sieceraria*(Mol.) Standley as determined by pulse radiolysis, Padmashree Joshi, Mukula Kulkarni, Sushama Joag, *Free Radicals and Antioxidants*, 2013, 3(1), 52-54  
ISSN: 2231-2536 Impact factor: 1.272
- 3) Redox chemistry of Cu(II) complexes of 6,7-dicyanodipyridoquinoxaline: a radiation chemical study, Kulkarni Mukula S., Rao B. S. M., *Inorganica Chimica Acta*, 2010, 363, 1813-1817  
ISSN: 0020-1693 Impact factor: 2.046
- 4) Synthesis, Characterisation and Radiation chemical study of Ru(II) complexes of 2 pyridyl quinoxaline; Kulkarni Mukula S., Kumbhar A. S., Mohan H., Rao B. S. M., *Dalton Transactions*; 2009, 6185-6191  
ISSN 1477-9226 Impact factor: 4.197
- 5) Free radical research by pulse radiolysis: pune university LINAC facility, P. Yadav, Kulkarni M. S., Shirdhonkar M. B., Rao B. S. M., *Current Science*, 2007, 92(5), 599-605  
ISSN 0011-3891 Impact factor: 0.833
- 6) Pulse radiolysis study of pyridine-substituted quinoxalines, Kulkarni Mukula S., Kumbhar A. S., Mohan H., Rao B. S. M., *Research on Chemical Intermediates*, 2005, 31(1-3), 63-72  
ISSN: 0922-6168 (Print) 1568-5675(online) Impact factor: 1.221
- 7) Redox chemistry of Ru(II) complexes of 6,7-dicyanodipyridoquinoxaline: a radiation chemical study, Kulkarni Mukula S., Rao B. S. M., Sastri C.V., Maiya B. G., Mohan H., Mittal J. P., *Journal of Photochemistry and Photobiology A: Chem.*, 2004, 167, 101-109  
ISSN: 1010-6030 Impact factor: 2.495

## Article published

'Teen Lakshavedhi Pustake' at Maharashtra Sahitya Patrika, issue 335, page 44

### **Invited Talks**

- 1) 'Distillation Technique ' workshop by SPPU Chemistry teachers initiative in collaboration with Board of Studies Chemistry, on 27<sup>th</sup> May 2021
- 2) 'Free Radical Chemistry: An approach to nanoparticle Synthesis" Workshop at PES' Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016 on 10<sup>th</sup> February 2021
- 3) 'Role of indicators" Teachers' Training Workshop at Department of Chemistry, PES' Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016 on 14<sup>th</sup> July 2018.
- 4) 'Free radical chemistry of metal complexes', two day workshop on Radiation Chemistry for the benefit of users and potential users of the Pulse Radiolysis facility NCFRR at Department of Chemistry, University of Pune, Pune during February 1-2, 2016.
- 5) 'Computers in Chemistry' Summer training program organized under DBT scheme for undergraduate students organized by Department of Chemistry, PES' Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016 during June 24-27, 2015
- 6) 'Physical Chemistry', Mukula Joshi, Workshop for the guidance of NET/SET exams for the postgraduate students organized by Department of Chemistry, PES' Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016 during March 9-11, 2015

### **Oral presentations at conferences**

- 1) 'Free radical chemistry of metal complexes', two day workshop on Radiation Chemistry for the benefit of users and potential users of the Pulse Radiolysis facility NCFRR at Department of Chemistry, University of Pune, Pune during February 1-2, 2012.
- 2) 'Free radicals: A tool to understand the redox chemistry' Mukula Joshi, organized by staff academy Chemistry PES' Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016 on October 9, 2011
- 3) Early stages in the growth of small silver particles in the presence of aliphatic alcohol radicals; E. Janata, S. B. Dhiman, E. Kanaki, M.S. Kulkarni, M.S. Alam; 3<sup>rd</sup> Asia Pacific Symposium on Radiation Chemistry and 10<sup>th</sup> Bannal Trombay Symposium on Raiation and Photochemistry; Treasure Islands, Lonavla (Maharashtra) India; September 14-17, 2010; ITRC-06 (presented by Dr. E. Janata)
- 4) Redox Chemistry of Redox Chemistry of Ru(II) Complexes of Substituted Polypyridyl Quinoxaline ; Mukula S. Kulkarni; International Conference on Emerging Trends in Chemistry, (ETIC) Department of Chemistry University of Pune, January 5-7, 2010; IPA-O-20

5) Redox Chemistry of Cu(II) complexes of 6,7-dicyano dipyridoquinoxaline, Mukula S. Kulkarni, Recent Developments in Chemistry, Department of Chemistry University of Pune, February 14-15, 2007

### Posters at conferences

1) 'Antioxidant activity of Bottle gourd (*Lagenaria Siceraria*): A comparative Study, Mukula Joshi, Sushama Joag, International Pune university Workshop on Radiation and Photochemistry at Department of Chemistry, University of Pune, Pune during January 10-12, 2016.

2) Synthesis, characterisation and pulse radiolysis study of Cu(II) polypyridyl complexes Mukula S. Kulkarni, B.S.M. Rao; 3<sup>rd</sup> Asia Pacific Symposium on Radiation Chemistry and 10<sup>th</sup> Biannual Trombay Symposium on Radiation and Photochemistry; Treasure Islands, Lonavla (Maharashtra) India; September 14-17, 2010; poster no RC-064 (selected as the best poster)

3) Study of antioxidant activity of Bottle gourd (*Lagenaria Siceraria*); Mukula S. Kulkarni, Sushama D. Joag, Padmashree R. Dekhane, B. S. M. Rao; National Symposium on Radiation and Photochemistry, Kumaun University Nainital (Uttarakhand) India, March 12-14, 2009; poster no RC-5

4) Radiation chemical oxidation of Ag<sup>+</sup>; Mukula S. Kulkarni, E. Janata; Trombay Symposium on Radiation and Photochemistry, YASHADA, Pune (Maharashtra) India; January 7-11, 2008; poster no RC-37

5) Redox chemistry of Cu(II) complexes of 6,7-dicyano dipyridoquinoxaline; Mukula S. Kulkarni, B. S. M. Rao; PHOTORADCHEM-2007, Mahatma Gandhi University, Kottayam (Kerala) India; February 8-11, 2007; poster no P-17 (selected as the best poster)

6) Radiation chemical study of Cu(II) complexes of 6,7-dicyano dipyridoquinoxaline; Mukula S. Kulkarni, B. S. M. Rao; Trombay Symposium on Radiation and Photochemistry, Bhabha Atomic Research Centre, Mumbai (Maharashtra) India, January 5-9, 2006; poster no RC-25

7) Redox chemistry of model Ru(II) complexes: a radiation chemical study, Mukula S. Kulkarni, B. S.M. Rao, C. V. Sastri, B. G. Maiya, H. Mohan, J. P. Mittal, *National Symposium on Radiation and Photochemistry*, Karnatak University, Dharwad, India, January 17-19,

2005, poster no RC-5

8) Free radical chemistry of ruthenium polypyridyl complexes: a radiation chemical study, Mukula S. Kulkarni, B. S. M. Rao, *24<sup>th</sup> Miller Conference on Radiation Chemistry, La Londe, France, September 10-15, 2005* (presented by Dr. B. S. M. Rao)

9) Redox chemistry of Ru(II) complexes of 6,7 dicyanodipyrido quinoxaline: a radiation chemical study, Mukula S. Kulkarni, B. S. M. Rao, B. G. Maiya, C. V. Sastri, H. Mohan, *Trombay Symposium on Radiation and Photochemistry, Bhabha Atomic Research Centre, Mumbai, India, January 8-12, 2004*, poster no RC-6

10) Redox chemistry of model Ru(II) complexes: a radiation chemical studies, Mukula S. Kulkarni, B. S.M. Rao, C. V. Sastri, B. G. Maiya, H. Mohan, J. P. Mittal, *National Symposium on Radiation and Photochemistry, Indian Institute of Technology, Kanpur, India, March 3-5, 2003*, poster no R-1

### **Workshops attended**

1) Participation in the workshop on 'Syllabus Restructuring of T.Y.B.Sc.' organized by A.R.Telang College, Nigdi on 8<sup>th</sup> January 2015

2) Workshop on NET and SET examination held at Department of Chemistry, PES' Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016 during March 2-4, 2012

3) State level workshop on Microscale Techniques in Physical Chemistry held at Abasaheb Garware college, Pune-411030 during February 21-22, 2012

4) Pune University Workshop on Radiation and Photochemistry, organized at Department of Chemistry, university of Pune during January 9-11, 2008

5) Participation in the workshop on 'Syllabus Restructuring of Master of Science' organized by University of Pune on 24<sup>th</sup> December 2007

6) Workshop on Radiation and photochemistry organized at Homi Bhabha Centre for Science Education, Mumbai, During January 5-7, 2004

7) Pune University Workshop on Radiation and Photochemistry, organized at Department of Chemistry, university of Pune during January 3-4, 2002

### **Faculty development programs / Refresher Course/orientation Program**

1. Managing Online Classes & Co- creating MOOCS 2.0" Organised by Teaching Learning Centre, Ramanujan College, University of Delhi, Under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching. May 18-June 3, 2020. **Completed with A+ grade**

2. 4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" organised by Teaching Learning Centre, Ramanujan College, University of Delhi, Under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching Online Ramanujan College, New Delhi June 4-July 3, 2020. **Completed with A+ grade**

3. Faculty Development Program on "Open Source Tools for Research" Organised by Teaching Learning Centre, Ramanujan College, University of Delhi, Under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching Online Ramanujan College, New Delhi June 8-14, 2020.

4. FDP on "Entrepreneurship, Incubation and Innovation" Organised by Teaching Learning Centre, Ramanujan College, University of Delhi, Under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching. June 23-29, 2020.

5. Two week Faculty Development Program on "ADVANCED CONCEPTS FOR DEVELOPING MOOCS" Online Ramanujan College, New Delhi July 2-17 July, 2020. **Completed with A+ grade.**

6. Faculty Development Program on ICT Tools in Teaching Chemistry conducted by Teresian Teaching Learning Centre and the Department of Chemistry and Centre for

Research of St.Teresa's College (Autonomous), Ernakulam, Kochi-682011 Online St.Teresa's College (Autonomous), Ernakulam, Kochi-682011 September 2-8, 2020. **A grade with 93.9 percentage.**

7. One Month Faculty Induction/Orientation Program organized by Guru Angad Dev Teaching Learning Centre, S.G.T.B. Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of MoE. This online FIP is equivalent to One Month face to face FIP and Orientation Program. December 3-30, 2020. **Completed with A+ grade.**

8. Faculty Enrichment Program on Quantum Mechanics Organised by Teresian Teaching Learning Centre and the Department of Chemistry and Centre for Research of St.Teresa's College (Autonomous), Ernakulam, Kochi-682011 Online St.Teresa's College (Autonomous), Ernakulam, Kochi-682011 January 18-23, 2021

9. Two-week Refresher course in Chemistry organised by National Academies of Sciences and Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016. November 27- December 11, 2017.