C U R R I C U L U M V I T A E

Makarand A. Kulkarni
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Scientific Instrument Expert
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EXPERIENCES

- Currently working as Scientific Instrument Expert at Punyashlok Ahilyadevi Holkar Solapur University, Solapur since August 2013. Well experienced in single handedly maintaining and executing analytical operations on various sophisticated scientific instruments such as GC-MS (Make-Shimadzu-QP5050 and QP 2020 with HS20), NMR (300 and 400 MHz, Make-Bruker), XRD (Make-Rigaku Ultima-IV), TGA-DSC (Mettler-Toledo), GC (Make-Agilent 6890), HPLC (Make-Agilent), Infra-Red spectroscopy (Make-Perkin-Elmer, Bruker-Alpha II and Thermo scientific), AAS (Make-Thermo scientific) and FESEM with EDS (Make: Tescan Clara).

- While working as Instrument-Expert, established good consultancy contacts for sample analysis with various academic organizations in and around the PAH Solapur University. i.e. within Dr.Babasaheb Ambedkar Marathwada University, Aurangabad, SRTM University, Nanded, Goa University, Academic institutes in Pune, Mumbai,Nagpur, Vijaypur, Gulbarga, Dharwad, etc.

- Associated with the various industries for providing analytical services. i.e. Vamsi Laboratory, Solapur, Ross Life sciences Pvt. Ltd, Bhosari/Pune. Harisi Chem Pvt. Ltd.Aurangabad. Cosmo Films Limited, Aurangabad, Mezler Chemicals, Kurkumbh /Pune, AM Lubricants and Coating, Nashik.

- Revenue generation for PAH Solapur University almost Rs.1.00 Cr upto present date though the sample analysis.

- AD index ranked researcher of PAH Solapur University. As an author and co-authors, 20 research publications in the journals of international reputes.

- Worked as active member in NAAC 2015 and NAAC 2022 cycle of Punyashlok Ahilyadevi Holkar Solapur University, Solapur.

- ❖ Worked as Committee member for Laboratory Instruments Handling Skills under Skill Development Centre of PAH Solapur University.

- ❖ Member of Technical Committee for Purchase of the Equipment under PM-USHA.

- ❖ Worked as Resource Person for Analytical Skill development lectures in various academic institutes.

- ❖ Worked as research-fellow on UGC, New Delhi sponsored Major Research project under the guidance of Prof. Uday. V. Desai at Department of chemistry, Shivaji University, Kolhapur from March 2009 to February 2012.

- ❖ Award of Senior Research Fellowship (SRF) by CSIR, New Delhi in February 2013.

- ❖ Worked as Project-Assistant-II on DBT sponsored Major Research project at National Chemical Laboratory, Pune under the guidance of Prof. Subhash. P. Chavan, Scientist-F Organic Chemistry Division, from July 2006 to April 2008. This project involves the development of an analytical method on GC and GC-MS for quantification of some internal bio-markers which are Vit. B_{12} sensitive.

- ❖ I strongly believe in working together which will led to implementation of innovative ideas, skills and exploring self potential and capacities for the continuous improvement to lead organization towards better productivity and mutual growth. I am quite interested in pursuing innovative ideas for designing and development of newer synthetic methods for organic transformations and their comprehensive analytical study for structure determination.

List of Publications

No.	Publication	Impact Factor
[1]	Lithium tetrafluoroborate catalyzed highly efficient inter- and intramolecular aza-Michael addition with aromatic amines. U.P. Lad, **M.A. Kulkarni**, U.V. Desai, P.P. Wadgaonkar. *C. R. Chimie.***2011,***14,** 1059.	**2.55**
[2]	Mechanistic approach for expeditious and solvent-free synthesis of α-hydroxy phosphonates using potassium phosphate as catalyst. **Makarand A. Kulkarni**, Uday P. Lad, Uday V. Desai, Satish D. Mitragotri, Prakash P. Wadgaonkar. *C. R. Chimie.***2013,** 16, 148.	**2.55**
[3]	A practical and highly efficient protocol for multicomponent synthesis of β-phosphonomalononitriles and	**2.55**

	2-amino-4H-chromen-4-yl phosphonates using diethylamine as a novel organocatalyst. **M.A. Kulkarni,** V.R. Pandurangi, U.V. Desai, P.P. Wadgaonkar. *C. R. Chimie.* **2012,***15,* 745.	
[4]	Diethylamine: A smart organocatalyst in eco-safe and diastereoselective synthesis of medicinally privileged 2-amino-4H-chromenes at ambient temperature. **Makarand A. Kulkarni**, Kapil S. Pandit, Uday V. Desai, Uday P. Lad, Prakash P. Wadgaonkar. *C. R. Chimie.* **2013,** *16,*689.	**2.55**
[5]	A simple, economical, and environmentally benign protocol for the synthesis of 2-amino-3,5-dicarbonitrile-6-sulfanylpyridines at ambient temperature. Uday V. Desai, **Makarand A. Kulkarni,** Kapil S. Pandit, Aparna M. Kulkarni & Prakash P. Wadgaonkar. *Green Chemistry Letters and Reviews.***2014,***7*:3, 228.	**6.02**
[6]	Nickel ferrite nanoparticles–hydrogen peroxide: a green catalyst-oxidant combination in chemoselective oxidation of thiols to disulfides and sulfides to sulfoxides. Aparna M. Kulkarni, Uday V. Desai*, Kapil S. Pandit, **Makarand A. Kulkarni** and Prakash P. Wadgaonkar. *RSC Adv*., **2014**, *4*, 36702.	**4.04**
[7]	Cellulose supported cuprous iodide nanoparticles (Cell-CuI NPs): a new heterogeneous and recyclable catalyst for the one pot synthesis of 1,4- disubstituted – 1,2,3-triazoles in water. Pramod V. Chavan, Kapil S. Pandit, Uday V. Desai, **Makarand A. Kulkarni** and Prakash P. Wadgaonkar. *RSC Adv.,* **2014,** *4*, 42137.	**4.04**
[8]	Tris-hydroxymethylaminomethane (THAM): a novel organocatalyst for an environmentally benign synthesis of medicinally important tetrahydrobenzo[b]pyrans and pyran-annulated heterocycles. Kapil S. Pandit, Pramod V. Chavan, Uday V. Desai, **Makarand A. Kulkarni** and Prakash P. Wadgaonkar. ***New. J. Chem.,*** 2015, 39, 4452.	**3.92**
[9]	Diethylamine-catalyzed environmentally benign synthesis of 1-oxo-hexahydroxanthenes and bis-coumarins at ambient temperature. Ravindra V. Kupwade, Kapil S. Pandit, Uday V. Desai, **Makarand A. Kulkarni**, Prakash P. Wadgaonkar. *Res. Chem. Intermed.* July 2016, Volume 42, Issue 7, 6313-6325.	**3.30**
[10]	Synthesis of oximes in aqueous medium using hyamine as an ecofriendly catalyst at ambient temperature. UP Lad, **MA Kulkarni**, RS Patil - *Rasayan J Chem* Vol.3, No.3, **(2010),** 425-428.	**0.33**
[11]	Diethylamine Dess–Martin periodinane: an efficient catalyst–oxidant combination in a sequential, one-pot synthesis of difficult to access 2-amino-3,5-dicarbonitrile -6-sulfanylpyridines at ambient temperature. RV Kupwade, SS Khot, **MA Kulkarni,** UV Desai, PP Wadgaonkar. *RSC*	**4.04**

	Advances 7 (62), **2017,** 38877-38883.	
[12]	Highly Eefficient and extremely simple protocol for the oxidation of α- hydroxyphosphonates to α-ketophosphonates using Dess–Martin periodinane.Ravindra V. Kupwade, Satish D. Mitragotri, **Makarand A. Kulkarni**, Uday V. Desai and Prakash P. Wadgaonkar. *Arkivoc,* 2020, part-IV, 50-58.	**0.69**
[13]	Antitumor and Antimicrobial Potential of Manganese (II), Nickel (II) and Copper (II) Complexes of 4-Methoxy Benzohydrazide Derived Schiff Base Ligand.Maina Awatade, Panchsheela Ubale, Amit Kamble, **Makarand Kulkarni,** Dipak Gaikwad, Ravindra Veerapur, Ghada Lamraoui, Shiva Prasad Kollur. *Letters in Applied NanoBioscience* Volume 11, Issue 1, 2022, 3249 – 3260.	**1.9**
[14]	A convenient and mild protocol for preparation of α –trimethylsilyloxyphosphonates using sulfamicacid and their oxidation to α ketophosphonates in the presence of N-bromosuccinimide. Satish D. Mitragotri, **Makarand A. Kulkarni**, Uday V. Desai and Prakash P. Wadgaonkar. *Arkivoc,* 2021, part-X, 8-17.	**0.69**
[15]	Potassium phosphate catalyzed highly efficient synthesis of structurally diverse thioethers at ambient temperature. Satish D. Mitragotri, **Makarand A. Kulkarni**, Uday V. Desai and Prakash P. Wadgaonkar. *Indian Journal of Chemistry,* 2022, Volume 61 (02), 154-158.	**0.41**
[16]	***A Novel Class of Pyrazoline Analogue of Combretastatin-A4 (CA-4): Synthesis Characterization and in-vitro Biological Testing****. Shringare, Sadanand N.; Bhale, Pravin S.; Chavan, Hemant V.; Hundekari, Purva L.;* ***Kulkarni, Makarand A.*** **Croatica Chemica Acta** *Vol. 94, No. 4, 2021, 191-199.*	***0.30***
[17]	Design, Synthesis, and Biological Testing of Pyrazoline Derivatives of Combretastatin-A4: A Quest for Anticancer, Anti-Inflammatory, and Antioxidant Agents. Sadanand N. Shringare, Hemant V. Chavan, Narendra R. Kamble, Radhakrishnan M. Tigote, Pravin S. Bhale, Mukund G. Mali, Shuddhodan N. Kadam, Kailas R. Kadam, Ganesh B. Pandhare, Amreen N. Khalifa, Nikita S. Pendpale, **Makarand A. Kulkarni**, and Babasaheb P. Bandgar. ***POLYCYCLIC AROMATIC COMPOUNDS: https://doi.org/10.1080/10406638.2023.2271113.***	***2.4***
[18]	Cyclohexylamine – An efficient organocatalyst for the synthesis of 2-amino-4*H*-chromene derivatives by multicomponent reactions of salicylaldehydes, active methylene compounds and nitroalkanes. Satish D. Mitragotri* Poonam H. Khyadage, Diksha S. Chorghade, **Makarand A. Kulkarni,** and Prakash P. Wadagaonkar. *Arkivoc* **2023** (vii) 2023,12118	**0.69**
[19]	Novel terephthalaldehyde bis(thiosemicarbazone) Schiff	**2.37**

	base ligand and its transition metal complexes as antibacterial Agents: Synthesis, characterization and biological investigations. Laxman V. Gavali,* Ali Abdulmawjood Mohammed, Muataz J.K. Al-Ogaili, Shashikant H. Gaikwad, **Makarand Kulkarni**, Rajesh Das, Panchsheela A. Ubale*. *Results in Chemistry* 7, **2024**, 101316.	
[20]	Facile construction of multifunctional xNiCo2O4/BiVO4 heterojunction with accelerated charge transfer for efficient photocatalytic treatment of Cr (VI), MB and TC under visible light. Nagesh D. Kolhe, Laxman S. Walekar, Abhijit N. Kadam, **Makarand A. Kulkarni**, Harichandra A. Parbat, Mrinmoy Misra, Balkrishna J. Lokhande, Sang Wha Lee, Dattakumar Mhamane, Mukund G. Mali. *Chemoshere*, Volume 352, March 2024, 141353.	**8.94**

ACADEMIC QUALIFICATIONS

Ph.D.

May 2014, The doctoral degree of Shivaji University, Kolhapur was received for the research studies done in the area of Synthetic Organic Chemistry. The thesis entitled as "**Development of Green Methodologies for Synthesis of Biologically Active Compounds**" was submitted under the guidance of Prof. Uday V. Desai, Department of Chemistry, Shivaji University.

M. Sc.

April 2006, Analytical Chemistry from Shivaji University, Kolhapur, Maharashtra, India, with 66.79 % (First Class.)

B. Sc.

April 2004, Chemistry from D.B.F. Dayanand College, Solapur, Maharashtra, India, with 67.88 % (First Class.)

H. S. C.

February 2000, Physics, Chemistry, Biology, Geology & English from D.B.F. Dayanand College, Solapur, Pune Board, Maharashtra, India with 67.00 % (First Class.)

S. S. C.

March 1998, S.V.C.S. High School, Solapur Pune Board, Maharashtra, India, with General subjects obtained 73.46 % (First Class.)

PERSONAL DETAILS

Date of Birth : 14 January 1983

Nationality : Indian

Languages Known: Marathi, Kannada, Telgu, Hindi and English.

Gender : Male

Marital Status : Married

REFERENCES:-

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