

CIRCULLAM VITAE



PAVAN KUMAR MANDALI

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OBJECTIVE

Seeking a challenging post-doctoral position in the field of Organic Synthesis, Metal Catalysis or Organometallic Catalysis in a well-established research group wherein my educational background along with my synthetic, analytical, and experimental skills will add value to the laboratory and team.

DOCTORAL RESEARCH EXPERIENCE

March 2014 -June 2014

Shastri Student Internship Project Fellow

Institution: University of Montreal, Montreal, Quebec, Canada

Project: Assembly of Pd(II) and BINAP and their use in amination reactions

July 2010 –July 2016

Institution: Indian Institute of Technology (IIT), Madras

Thesis Title: Palladium Nanoparticles Catalyzed Suzuki and Sonogashira Transformations

POSTDOCTORAL RESEARCH EXPERIENCE

Sep 2020-Till date

Institution: SASTRA Deemed-to-be University, Thanjavur, Tamil Nadu

Project: Diabetic Retinopathy

- Design and Synthesis of Novel Cerberus Molecules for developing Electro-chemical sensors for various bio-markers and fabricating the point-of-care devices by utilizing Screen Printer Electrodes.

March 2017 -July 2017

Institution: JNCASR, Bangalore

Project: Asymmetric Catalysis

- Synthesis of Indirubin derivatives for biological applications
- Synthesis of Chiral Catalysts

August 2016 -November 2016

Institution: IIT Madras, Chennai

Project: Dye Sensitized Solar Cells

- Synthesis, Fabrication and Performance Evaluation of Dye Sensitized Solar Cell (DSSC): A novel approach enhance the Efficiency of DSSC

TEACHING EXPERIENCE

Role: Senior Lecturer (February 2018 – July 2019)

Institution: FIITJEE Ltd, Chennai

Job Description: Novel Teaching Methodologies to train the students for prestigious IIT-JEE

REVIEWER ACTIVITY

1. Journal name: **Polymers for Advanced Technologies, WILEY Publishers**

FELLOWSHIPS AND AWARDS

1. Received **Prof. Werner Best Thesis Award** for best PhD thesis of the year (2016-2017) in Inorganic and Analytical Division, Department of Chemistry, IIT Madras.
2. Received **SSIP** – Shastri Student Internship Project (A Prestigious **Indo-Canadian** Fellowship)
3. **IITM** - Junior Research Fellowship and Senior Research Fellowship (July 2010 – July 2015)
4. Secured **36 all India rank** - CSIR-NET - National Eligible Test (June 2011)
5. Secured **390 all India rank** - GATE - Graduate Aptitude Test in Engineering (March 2010)
6. Secured **3rd Rank** in Master of Science – NIT Trichy (2006-2008)

TEACHING AND RESEARCH PROFICIENCY

1. Conducted Organic & Inorganic chemistry laboratories for B.Tech and M.Sc students as a teaching assistant (TA) at IIT Madras, Chennai, India
2. Mentored for two PhD students and three MSc thesis work at IIT Madras, India.
3. Acquired excellent hands-on experience in handling air and moisture sensitive reagents to carry out reactions under inert condition using glove box and bench-top Schlenk lines.
4. Good experience in performing Vacuum distillation & Vacuum sublimation.

RESEARCH PUBLICATIONS

1. **P. K. Mandali** and D. K. Chand, *Catal. Commun.*, **2013**, *13*, 16-20. (**Most cited paper in 2017**)
2. **P. K. Mandali** and D. K. Chand, *Catal. Commun.*, **2014**, *47*, 40-44.
3. **P. K. Mandali** and D. K. Chand, *Synthesis*, **2015**, *47*, 1661-1668. **highlighted in (www.organic-chemistry.org/abstracts/lit4/976.shtm)**
4. A. K. Pal, **P. K. Mandali**, D. K. Chand and G. S. Hanan, *Synlett.*, **2015**, 1408-1412.
5. **P. K. Mandali**, A. K. Pati, A. K. Mishra and D. K. Chand, *Chemistry Select*, **2017**, *2*, 5259-5265.
6. S. Nellaippan, **P. K. Mandali**, A. Prabakaran and U. M. Krishnan, *Chemosensors*, **2021**, *9*, 182.
7. S. B. Annes, R. Saritha, K. Chandru, **P. K. Mandali**, S. Ramesh, *J. Org. Chem*, **2021**, *86*, 16473.

PATENT

“Squaramide-Boronic Acid Derivative and its application for Electrochemical Sensing of Glycated Hemoglobin (HbA1c)”. (Application Number: 202141055245)

INSTRUMENT AND SOFTWARE HANDLED

1. FT NMR (Bruker DPX-400&500 MHz and JEOL-600 MHz)
2. UV-visible Spectrophotometer (Elico-model-SL171)
3. FT-IR (Perkin Elmer 882)
4. GC and HPLC (Waters)
5. Nano-ITC (TA Instruments)
6. MS-Office, Chemdraw, TopSpin, Scifinder and Origin 8.5.

REFERENCES

Dr. Dillip K. Chand
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Dr. Garry S. Hanan
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