**Tirumala G Varadaraju, Ph. D. – Curriculum Vitae**

**Contact information**

Mobile:+91-8464996822, +91-8247646925 Email: [varadaiitm2002@gmail.com](mailto:varadaiitm2002@gmail.com)

**Objective:**

As an organic chemist with 11-12 years’ experience in R&D (Synthesis and Project Management), I am looking forward to a role with potential for exciting career growth. As an avid and enthusiastic team player, I can easily dissolve into the fabric of the company, and work with the team for great results. It is my endeavor to work for an organization where I can significantly contribute in the development of the organization and bring in the performance excellence in my field of work.

**Successful Tech-transfer Projects:**

* Darunavir ethanolate
* Carglumic acid
* Danofloxacin Mesylate
* D-Penicillamie
* Ethacrynate Sodium
* Indigo Carmine
* Diazoxide
* Netazepide (YF:476)
* Dichlorphenamide
* Gadoxetate Disodium (Stage-6 Intermediate)

**Successful Lab Development (Lab validation completed and Tech-Transfer in progress)**

* Gamithromycin
* Trilostane
* Doxylamine Succinate
* Mifepristone
* Lurasidone Hydrochloride

**Present Organization-V:**

**Assistant General Manager (AGM)**

**Suven Pharmaceuticals Ltd -API-R&D, Pashamylaram, Hyderabad.**

(Oct 2021---Until Now)

**Job Responsibility:**

* Provide necessary support in troubleshooting for ongoing projects in plant.
* Exploring of possibility of New API’s as per present requirement
* Non-Infringing Process Development of API’s
* Impurities synthesis
* **Rifampin:** (3 Stage Synthesis)
* Lab development in progress.
* Three process impurities synthesized.
* **Levocarnitine:** (4 Stage Synthesis)
* Lab development in progress

**3. Ferric Maltol**

* Lab development in progress.

**Organization-IV:**

**Assistant General Manager (AGM) and In-charge for API-R&D and Analytical Lab**

**Cronus Research Labs Private Limited API (R & D), Hyderabad, India**

(April 2017---Sep 2021)

**Job Responsibility:**

* Established the new API-R&D center along with Analytical Lab
* Overall Responsibility of API-R&D and Analytical Lab
* Planning, resource allocation and providing timelines for the projects
* Non-Infringing Process Development of API’s
* Product feasibility in lab and commercial level.
* Development of API Teck-pack along with analytical development report for API.
* Develop cost effective, environment friendly and commercially viable processes
* To study initial feasibility, lab validations and tech transfer to manufacturing, accommodate the process at scale by supporting tech transfer team
* Prepare process development reports as per regulatory requirements
* To provide necessary support to scale up manufacturing teams for process scale up and validation
* Provide necessary support in troubleshooting for ongoing projects.
* Impurities synthesis
* Scientific assessment of New molecules
* Review of molecules and ensure right track scientifically up-to Regulatory filing

**1. Carglumic acid:** (1 Stage Synthesis with five consecutive purifications)

* Lab development completed and technology has been transferred to the plant.
* 2.0 Kg synthesized and dispatched from R&D.
* Plant validation completed (100 Kg) and planning for DMF filling.

**2. Danofloxacin Mesylate:** (8 Stage Syntheses)

* Lab development completed and technology has been transferred to the plant.
* 4.0 Kg synthesized and dispatched from pilot plant.
* Plant validation completed (70 Kg) and planning for DMF filling.

**3. Gamithromycin:** (5 Stage Syntheses)

* Non-infringing process developed.
* Filled patent application for non-infringing process
* Tech-transfer is in progress.

**4. Dichlorphenamide:** (3 Stage Synthesis)

* Lab development completed and technology has been transferred to the plant.
* 500 g synthesized and dispatched.
* DMF filed.

**5. Trilostane:** (4 Stage Synthesis)

* Lab development completed and technology has been transferred to the plant.
* 500 g synthesized and dispatched.
* Tech-transfer is in progress.

**6. Mifepristone:** (6 Stage Synthesis)

* Lab development completed with 95% purity.
* Developed new process for key intermediate.
* Hold due to costing concerns.

**Organization-III:**

**Deputy Manager:**

Biophore India Pharmaceuticals Private Limited API (R & D), Hyderabad, India

(Oct 2014---April 2017)

**Job Responsibility:** Managing group consists of 8-10 chemists with two Assistant Managers for non-Infringing process development of API molecules as well as syntheses of impurities for various on-going DMF filling projects.

1. **D-Penicillamie:** (4 Stage Synthesis)

* Lab development completed and technology has been transferred to the plant.
* 350 Kg synthesized and dispatched.
* DMF filed.

1. **Ethacrynate Sodium:**

* Lab development completed and technology has been transferred to the plant.
* DMF filled.

1. **Indigo Carmine:** (2 Stage Synthesis)

* Lab development completed and technology has been transferred to the plant.
* DMF filled.

1. **Gadoxetate Disodium:** (9 Stage Synthesis)

* Lab development completed until Stage-**8** (n-1) compound.
* 300 Kg of Stage-6 completed at Plant.

1. **Doxylamine Succinate:** (4 Stage Synthesis)

* Lab development completed.
* Synthesized 120 g of API quality material.
* Synthesized of three EP- Impurities and two process related impurities.

1. **Diazoxide:** (4 Stage Synthesis)

* Lab development completed and technology has been transferred to the plant.
* DMF filed.

1. **Netazepide (YF:476)** (10 Stage Synthesis)

* Lab development completed.
* Synthesized 1.5 Kg of API with ICH quality.

1. **Clofarabine:**

* Developed process for the preparation of -anomer of API.
* Synthesized five process impurities for filling DMF.

**Organization-II**

**Assistant Manager:** Micro Labs- API, Bangalor**e**  (Jan 2014---Sep 2014)

**Job Responsibility:** Managed a group consists of 3-4 chemists for process development of API molecules.

1. **Darunavir ethanolate:** (6 Stage Synthesis)

* Lab development completed and technology has been transferred to the plant.
* Synthesized of 5 Impurities of Darunavir ethanolate, among them, two are new impurities
* DMF filed.

**2. Lurasidone Hydrochloride:** (4 Stage Syntheses)

* Lab development completed and 100 g of API sample synthesized.

**Organization-I**

**Scientist (Manager)**

GVK Biosciences, Hyderabad, India. (Nov.2011-Jan 2014)

**Job Responsibility:**

* Managed a team comprises of chemists of twelve in numbers in order to run diverse med-chem projects for big pharma & biotechs on FTE & FFS mode
* Managed a team comprises of chemists of twelve in numbers in order to run diverse med-chem projects for big pharma & biotechs on FTE & FFS mode.
* Planning & execution of projects related to synthesis of focused libraries and preparation of scaffolds & building blocks.
* Communications with the clients for various project related issues.
* Making of final reports of project(s).

**Educational Qualification**

**Postdoctoral Research Fellow (National Science Foundation** (Aug. 2010−Oct.2011)

National Tsing Hua University, Hsinchu, Taiwan, under guidance of Prof. Reuben Jih-Ru Hwu

**Doctor of Philosophy** (**PhD): Synthetic Organic Chemistry,** (Sep. 2004June. 2010)

National Tsing Hua University, Hsinchu, Taiwan, under guidance

of Prof. Reuben Jih-Ru Hwu

***Thesis: “Asymmetric Syntheses of Polymethylated Caffeic Acid Dimers and Trimers as Anti-HIVAgents and Total Synthesis of Rosmarinic Acid”***

**Master of Science (Chemistry):** (Aug. 2001Aug. 2003)

**Indian Institute of Technology, Madras**

Thesis entitled as “Lithium Intercalation into Sodium Zirconium Phosphate Materials"

**Bachelors’ Degree: B.Sc (M.P.C)** **Osmania University, Hyderabad** (June1997July 2000)

**Fellowships/Awards**

* Ph.D. Fellowship funded by National Science Council, Taiwan, R.O.C (2004  2010).
* Graduate Aptitude Test in Engineering (GATE) 2003 Score: 88.57 percentile

**Publications and Patents (filled)**

1. Synthesis of Anti-HIV Lithospermic Acid by Two Diverse Strategies. **Tirumala G. Varadaraju**, Jih Ru Hwu,\* ***Org*. *Biomol*. *Chem*., 2012**, **10**, **54565465**. (***Cover Page Article***)
2. First Total Synthesis of Oresbiusin A and B Their Antipodes and Racemates: Configuration Revision and Anti-HIV Activity. Jih Ru Hwu,\* **Tirumala G. Varadaraju**, Ibrahim S. Abd- Elazem,and Ru Chih C. Huang\****Eur*. *J*. *Org*. *Chem,* 2012, 4684-4688**.
3. First Asymmetric Total Syntheses of Permethylated Rosmarinic Acid, Salvianolic Acid D, C, and A: As Anti-HCV Agents. Jih Ru Hwu,\* **Tirumala G. Varadaraju** (***Manuscript in Preparation***).

**Patents Filled:**

1. Improved Process for the Preparation of Darunavir Ethanolate: App no/Grant no: IN311671

(2451/CHE/2014):

1. Novel process for the preparation of ethacrynate sodium: WO 2016/189549 Al

**Conference Presentations:**

1. “Synthesis and Applications of Benzo[*b*]furans to Functional Molecules” **Tirumala. G. Varadaraju** and Jih Ru Hwu**\*** NTHU (Taiwan)–TIT (Japan)-2005; Workshop on Organic Chemistry for Junior Chemists- February 25–27, 2005.
2. “Asymmetric Formal Total Synthesis of (+)-Rosmarinic Acid” **Tirumala. G. Varadaraju** and Jih Ru Hwu\* NTHU (Taiwan)–KAIST (South Korea)-2009; Junior Chemists Workshop-February 13–15, 2009.
3. “The First Asymmetric Chemical Syntheses of Oresbiusins and Lithospermic Acid with Anti-HIV Activity” J.R. Hwu\*, **T.G. Varadaraju**, I.S. Abd-Elazem, and R.C.C. Huang,

*2nd Antiviral Congress, 11-13 November 2012,* Cambridge, MA, USA

**Personal:**

Date of Birth: 24th May, 1980

Sex: Male

Marital Status: Married, Two Children

Nationality: Indian