



HARI BABU KOTHAPALLI

Postdoctoral Research Associate, Ph.D

CONTACT

- +1(662)3804281
+918639000983
- kothapalliharibabu@gmail.com
- 2 Stewart st, Oxford, MS 38655
USA
- Google Scholar
<https://share.google/tvjebqKL Fjhp2Z7hu>
- Ole Miss
<https://share.google/5ru1eFbh 3Gqdblblg>

EDUCATION

UNIVERSITY OF MISSISSIPPI, (OXFORD, MS, US)

Postdoctoral Research Associate,
Nat'l Center for Natural Prod
Research

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD, INDIA

Ph.D, Pharmaceutical science

ANNAMALAI UNIVERSITY, TAMIL NADU, INDIA

M. Pharmacy (Pharmaceutical
Analysis and Quality Assurance)

ACHARYA NAGARJUNA UNIVERSITY, ANDHRA PRADESH, INDIA.

B. Pharmacy

PROFILE SUMMARY

Multidisciplinary Scientist specializing in analytical, formulation with over 10 years of pharmaceutical research experience. Expertise in the GMP and GLP environment. Proven leadership in drug stances and drug products analytical development, method validation, and method transfer. Skilled in addressing critical FDA deficiencies in ANDAs and DMFs. Strong background in complex natural products, chiral analysis, anti-cancer drugs, peptides and polysaccharides.

WORK EXPERIENCE

- University of Mississippi, Oxford, MS, US** SEP 2022-PRESENT
Post doctrol Research Assocate
 - Chemical fingerprinting and characterization of marker compounds or bioactive fraction extractions in botanicals: qualitative and quantitative analysis.
 - Development and validation of analytical methods for a wide range of phytochemical profiling of botanicals and dietary supplements.
 - Optimization of extraction methods.
 - Development of preparative (prep-HPLC) methods for natural product isolation and purification.
 - Identification and quantification of PFAS in cosmetic products. ☑
Analysis of peptides in cosmetic products.
 - Analysis of drugs and their metabolites in biological samples.
 - Participated in the FDA training program to educate and train FDA inspectors in the area of quality control of natural products and dietary supplements.
 - Played an important role in organizing two international conferences held at the Oxford Conference Center, Oxford, MS, USA.
- Dr Reddy's Laboratory, IPDO-Hyd, India** Mar 2020- Sep-2022
Analytical Specialist in Analytical R&D
 - Development and quantification of nitrosamine impurities in drug substances and drug products.
 - Isolation and characterization of process-related impurities and degradation products in drug substances and drug products as per ICH guidelines.
 - Reference standards qualification (RSQ).
 - Troubleshooting and resolving analytical-related problems, maintaining the laboratory as per GLP guidelines.
 - Development and quantification of genotoxic impurities (GTIs) in drug substances and drug products.
 - Preparation of draft responses for FDA queries.
 - In-depth structural characterization of oligosaccharides and active ingredients of complex drugs.

SKILLS

- Project Analytical Development Planning
- Product Development Planning and Reports
- Mentoring and Lab Management
- Reverse Engineering
- Address FDA Deficiencies in DMFs and ANDAs
- Unknown Impurities characterisation
- HPLC, GC, LC-MS, GC-MS, Prep-MS
- Dissolutions.
- API Solid State Characterization
- Worked with CMO, CRO & CDMOs
- Peptides
- Injectables (Suspensions, Solutions, Lyophilized Powders) and Solid orals
- Complex Products Analytical Method Development
- Method Validation and Transfer
- Extractables
- Leachables Studies
- Nitrosamine Impurities
- Peptide and protein De Novo Sequencing by Mass Spectrometry

POSTERS PRESENTED IN CONFERENCES

Quantitative Determination of Cinnamaldehyde and Related Metabolite Cinnamic Acid from Bio fluids of Human Liver Microsomes Assay by UHPLC-MS/MS Hari Babu Kothapalli, Yan-Hong Wang, Islam Husain, Shabana I. Khan, Ikhlas A. Khan 22nd Annual OXFORD ICSB April 15th-18th 2024. Oxford Conference Center, 102 ED Perry Blvd, Oxford, Mississippi.

Shilpa mediacare Pvt Ltd, Vizag, India Deputy Manager in Analytical R&D

DEC 2016- FEB-2020

- Analytical Method development and Method Validation of Related Substances, Dissolution, Residual Solvents, and Assay for Injectables and Oral solid dosage forms of small molecules, including Oncology and Non-Oncology products.
- Successfully executed Excipient compatibility studies, hold time, filter compatibility studies, and physiological solution compatible studies (Admixture studies) and preformulation studies for oral solid dosage forms.
- Transferred Analytical Methods from the R&D department to the QC Laboratory.
- Development of Deactivation methods and cleaning methods for Oncology products.
- Handling of queries for the US, Europe, and Rest of the World (ROW) Markets.
- Isolation & Qualification of known and unknown impurities.
- In Process and Stability analysis of Drug products & Drug substances for all types of Dosage forms including solid orals and injectables.
- Handling of OOS and investigation studies related to manufacturing plant queries.
- Performed forced degradation studies for various Drug Products.
- Preparation of Standard Test Procedures (STP's), Protocols, Analytical method development and validation reports.
- Responsible for troubleshooting methods in QC and support for Exhibit and pre-exhibit analysis.

Cadila Pharmaceuticals Pvt Ltd, Ahmd, India. June 2015-Dec 2016 Research Associate in Analytical R&D

- Analytical method development and method validation for related substances, residual solvents, and assay of drug substances.
- Reaction monitoring analysis.
- Performed forced degradation studies for various drug substances.
- Isolation and qualification of known and unknown impurities.
- Determination of enantiomeric ratios.
- Preparation of Standard Test Procedures (STPs), protocols, and analytical method development and validation reports.
- In-process and stability analysis of drug substances.
- Responsible for troubleshooting methods in QC and providing support for exhibit and pre-exhibit analysis.
- Transferred analytical methods from the R&D department to the QC laboratory

PUBLICATIONS

- An Ultrahigh-Performance Liquid Chromatography Coupled with Tandem Mass Spectrometry (UHPLC-MS/MS) Method for Toxicity and Safety Level Assessment of Oxygen Heterocyclic Compounds and Terpene in Cold-Pressed Grapefruit Essential Oils. Sultan Zahiruddin, Yan-Hong Wang, Hari Babu Kothapalli, Bharathi Avula, Amar Gopal Chittiboyina, Ikhlas A. Khan. ACS Omega 2025, 10, 29654–29664
- Phytoconstituents of Extract and Fractions of *Macrosphyra longistyla* Leaves Inhibit Nitric Oxide and Prostaglandins Inflammatory Mediators: In Vitro, In vivo, and Chemical. Mutiat B. Ibrahim, Oluwaseun T. Ajayi, Yan-Hong Wang, Hari B. Kothapalli, Ikhlas A. Khan, Zulfiqar Ali. Springer: Revista Brasileira de Farmacognosia. Issue 3; (2025).
- Pre-ADMET studies of 5-(3', 4'-dihydroxyphenyl)-γ-valerolactone, the bioactive intestinal metabolite of proanthocyanidins. Larissa Della Vedova, Islam Husain, Yan-Hong Wang, Hari Babu Kothapalli, Francesca Gado, Giovanna Baron, Simone Manzi, Paolo Morazzoni, Giancarlo Aldini, Ikhals A. Khan. Arch. Pharm. (2025);358:e2400575.

POSTERS PRESENTED IN CONFERENCES

- High-Throughput Quantitative analysis of purine alkaloids in Species and Hybrids of *Ilex* by UHPLC-QTOF MS Hari Babu Kothapalli, Yan-Hong wang, Charles R. Yates, John Nix, Carlos Iglesias, Thomas G. Ranney, Ikhlas A. Khan 23rd Annual OXFORD ICSB April 7th-11th 2025. Oxford Conference Center, 102 ED Perry Blvd, Oxford, Mississippi.
- Quantitative Determination of Cinnamaldehyde and Related Metabolite Cinnamic Acid from Bio fluids of Human Liver Microsomes Assay by UHPLC-MS/MS Hari Babu Kothapalli, Yan-Hong Wang, Islam Husain, Shabana I. Khan, Ikhlas A. Khan 22nd Annual OXFORD ICSB April 15th-18th 2024. Oxford Conference Center, 102 ED Perry Blvd, Oxford, Mississippi.
- Quantitative Determination of Six Peptides from Cosmetic Products by UHPLC-MS/MS Yan-Hong Wang, Washim Khan, Hari Babu Kothapalli, Bharathi Avula, Zemin Wang, Miryeong Sohn, Amar Gopal Chittiboyina, Ikhlas A. Khan. 21st Annual OXFORD ICSB April 24th-27th 2023. Oxford Conference Center, 102 ED Perry Blvd, Oxford, Mississippi.
- A simple and convenient analytical method for assessing the effect of shodhana process for Detoxification of *Gloriosa superba* using High-performance liquid chromatography K. Hari Babu, M. Ajitha, U.V.Mallavadhani. Indian Society of Analytical Sciences (ETAS-2013), 27-28 November. Hyderabad, India.

PUBLICATIONS

- Evaluation of bioaccessibility, metabolic clearance and interaction with xenobiotic receptors (PXR and AhR) of cinnamaldehyde. Islam Husain, Bill J. Gurley, Hari Babu Kothapalli, Yan-Hong Wang, Larissa Della Vedova, Amar G. Chittiboyina, Ikhlas A. Khan, Shabana I. Khan. Food Chemistry: Molecular Sciences 10 (2025) 100237.
- Quantitative Estimation of (-)-Hinokinin, a Trypanosomicidal marker in *Piper cubeba* and of its Commercial Formulations using HPLC-PDA-ESI-MS Method. Kothapalli Haribabu, Makula Ajitha, Uppuluri Venkata Mallavadhani*. Journal of Pharmaceutical analysis, 5(2), (2015), 130-136.
- Simultaneous determination of Asarinin and Sesamin in *Piper chaba* Hunter Fruit: by using HPTLC-MS Method: Effect of different extraction methods on the yield of marker compounds. Kothapalli Haribabu, Makula Ajitha, Uppuluri Venkata Mallavadhani. Journal of analytical and bioanalytical techniques, 5(4), (2014), 199.
- New protein glycation inhibitory free radical scavenging compound from *Duranta repens* L. G. Shankaraiah, Ashok K. Tiwari, T. Vijaya Kumar, D. Anand Kumar, S.S.N. Raju, K. Hari Babu, Ravi Varala, M.V. Basveswara Rao, K. Suresh Babu. Journal of Pharmacy Research, 7 (2) (2013) 162-166.
- Quantification of Bergenin from *Mallotus philippinensis* by HPTLC-MS and Study on Different Extraction Methods. Kothapalli Haribabu, Makula Ajitha, Bokka Ramesh, Katragadda Suresh Babu and Janaswamy Madhusudana Rao. Journal of Planar Chromatography 25 (2012) 5, 445.
- Synthesis and Biological Evaluation of New Piplartine Analogues as Potent Aldose Reductase Inhibitors (ARIs) Vidadala Ramasubba Rao, Puppala Muthenna, Gundeti Shankaraiah, Chandrasekhar Akileshwari, Kothapalli Hari Babu, Ganji Suresh, Katragadda Suresh Babu, Rotte Satish Chandra Kumar, Kothakonda Rajendra Prasad, Potharaju Ashok Yadav, J. Mark Petrash, Geereddy Bhanuprakash Reddy, Janaswamy Madhusudana Rao. European Journal of Medicinal Chemistry 57 (2012) 344.
- Simultaneous determination of bioactive compounds in *Piper nigrum* L. and a species comparison study using HPLC-PDA. Vidadala Rama Subba Rao, Sagi Satyanarayana Raju, Vanka Umamaheswara Sarma, Fouriner Sabine, Kothapalli Hari Babu, Katragadda Suresh Babu and Janaswamy Madhusudana Rao. Natural Product Research 25 (2011) 1288.
- New bioactive macrocyclic diterpenoids from *Jatropha multifida*. Boddu Shashi Kanth Avula Satya Kumar, Digambar Balaji Shinde, Kothapalli Hari Babu, Tuniki Venugopal Raju, Chityal Ganesh Kumar, Pombala Sujitha, Biswanath Das. Bioorganic & Medicinal Chemistry Letters 21 (2011) 6808.
- Microbial transformation of (+)-heraclenin by *Aspergillus niger* and evaluation of its antiplasmodial and antimicrobial activities. P. Mangala Gowri, K. Haribabu, Hara Kishore, O. Manjusha, Sukla Biswas and U. S. N. Murty. Current Science 100 (2011) 1706.
- Chabamides F and G, two novel dimeric alkaloids from the roots of *piper chaba* hunter; V. Rama Subba Rao, G. Suresh Kumar, V. U. M. Sarma, S. Satyanarayana Raju, K. Hari Babu, K. Suresh Babu, T. Hari Babu, K. Rekha, J. Madhusudana Rao. Tetrahedron Letters 50 (2009) 2774.
- Development and validation of a HPTLC-ESI/MS Method for the Simultaneous Determination of Ramipril, Hydrochlorothiazide and Telmisartan in Tablet Dosage Form. Bokka Ramesh, Kothapalli Hari babu, Vanka Uma Maheswara Sarma, Potturi Sita Devi. Journal of Pharmacy Research 4 (2011) 3306.
- HPTLC Method for Determination of Darunavir in rat plasma and its application in Pharmacokinetic studies. Bokka Ramesh, Sisla Ramakrishna, Rentam Kiran Kumar Reddy, Kothapalli Hari babu, Vanka Uma Maheswara Sarma & Potturi Sita Devi. Journal of Liquid Chromatography & Related Technologies, 36 (2013) 167.

POSTERS PRESENTED IN CONFERENCES

- Simultaneous determination of bioactive compounds in Piper nigrum and a species comparison study using HPLC-PDA. V. Rama Subba Rao, S. Satyanarayana Raju, V. U. M. Sarma, F. Sabine, K. Hari Babu, K. Suresh Babu, Richa Pandey and J. Madhusudana Rao. ASOMPS XIII-2008, 3-6 November. Hyderabad, India.

PERSONAL INFORMATION

- **D.O.B** - 20 April, 1984
- **Nationality** - Indian
- **Passport no.** - W2048381
- **Address** - House no. 222
- Street no. A40, Santosh nagar ,Kandukur, Nellore district, Andra Pradesh, India
- **Marital Status** - Married
- **Languages** - English, Telugu, Hindi

PUBLICATIONS

- Enantioselective Michael addition of aldehyde to nitroolefins catalyzed by pyrrolidine-HOBT Togapur Pavan Kumar, Mohammad Abdul Sattar, Sthanikam Siva Prasad, Kothapalli Haribabu, Cirandur Suresh Reddy. Tetrahedron: Assymetry, Volume 28, Issue 3, 15 March (2017), Pages 401-409.
- Self gelating isoracemosol A, new racemosaceramide A, and racemosol E from Barringtonia racemosa. Mangala GowriPonnapalli, NaliniDangeti, Madhu Babu Sura, Haribabu Kothapalli, V. S. Sarma Akella, Jeelani BashaShaik. Natural Product Research 31 (2017) Pages 63-69.
- Pyrrolidine-HOBT: an oxytriazole catalyst for the enantioselective Michael addition of cyclohexanone to nitroolefins in water. Togapur Pavan Kumar, Sthanikam Siva Prasad, Kothapalli Haribabu, Veerjale Naveen Kumar, Cirandur Suresh Reddy. Tetrahedron: Assymetry, Volume 27, Issues 22-23, 15 December (2016), Pages 1133-1138.
- Pyrrolidine-oxyimides: new chiral catalysts for enantioselective Michael addition of ketones to nitroolefins in water. Togapur Pavan Kumar, Laghuvarapu Radhika, Kothapalli Haribabu, Veerjale N Kumar. Tetrahedron: Asymmetry. Volume 25, Issue 23, 15 December (2014), Pages 1555-1560.
- Enantioselective Michael addition of α,α -disubstituted aldehydes to nitroolefins catalyzed by pyrrolidine pyrazole. Togapur Pavan Kumar, Kothapalli Haribabu. Tetrahedron: Asymmetry. 25, (2014) 1129-1132.
- AZT-prolinamide: the nucleoside derived pyrrolidine catalysts for asymmetric aldol reactions using water as solvent. Tumma Naresh, Togapur Pavan Kumar, Kothapalli Haribabu, Srivari Chandrasekhar. Tetrahedron: Asymmetry, 25, (2014) 1304-1345.
- Phthalimido-prolinamide: a new chiral catalyst for solvent free enantioselective aldol reactions. Togapur Pavan Kumar, Namdevrao Chethan Vavle, Vidyavathi Patro, Kothapalli Haribabu, Tetrahedron: Asymmetry, 25, (2014) 457-461.
- Peptidomimetic organocatalysts: efficient Michael addition of ketones onto nitroolefins with very low catalyst loading. Srivari Chandrasekhar, Chintakunta Praveen Kumar, Togapur Pavan Kumar, Kothapalli Haribabu, Bharatam Jagadeesh, Jerripothula K. Lakshmi and Prathama S. Mainkar, RSC Adv, 4 (2014) 30325.
- Organocatalyzed Intramolecular Michael Addition of Morita-Baylis-Hillman Adducts of β -Arylnitroethylenes: An Entry to 3-Aryl-4-nitrocyclohexanones. Chada Raji Reddy, Motatipally Damoder Reddy, Kothapalli Haribabu. European Journal of Chemistry (2012) 6414.
- A chiral pyrrolidine - pyrazole catalyst for the enantioselective Michael addition of carbonyls to nitro olefins. Srivari Chandrasekhar, Togapur Pavan Kumar, Kothapalli Haribabu, Chada Raji Reddy, Chitumalla Ramesh Kumar. Tetrahedron: Asymmetry 22 (2011) 697.
- Hydroxyphthalimide allied triazole-pyrrolidine catalyst for asymmetric Michael addition in water. Srivari Chandrasekhar, Togapur Pavan Kumar, Kothapalli Haribabu, Chada Raji Reddy. Tetrahedron: Asymmetry 21 (2010) 2372.