Research Publications:

Review Papers

35. Zirconia-based stationary phases for chiral separation
**Avvaru Praveen Kumar** and Jung Hag Park
Accepted review in press of **Analytical Letters**

34. Recent development on spectroscopic methods for chiral analysis of enantiomeric compounds
**Avvaru Praveen Kumar**, Dongri Jin, Yong-Ill Lee
[http://www.informaworld.com/smpp/content~content=a911398849~db=all~jumptype=rss](http://www.informaworld.com/smpp/content~content=a911398849~db=all~jumptype=rss)

Research Papers

**CE (Capillary Electrophoresis) and CEC (Capillary Electrochromatography)**

33. Chiral separation of basic compounds on a cellulose 3,5-dimethylphenylcarbamate-coated zirconia monolith in basic eluents by capillary electrochromatography
**Avvaru Praveen Kumar**, Jung Hag Park

32. Fast separations of chiral β-blockers on a cellulose tris(3,5-dimethylphenylcarbamate)-coated zirconia monolithic column by capillary electrochromatography
**Avvaru Praveen Kumar**, Jung Hag Park

31. Azithromycin as a new chiral selector in capillary electrophoresis
**Avvaru Praveen Kumar**, Jung Hag Park
30. Enantioseparation on cellulose dimethylphenylcarbamate-modified zirconia monolithic columns by reversed-phase capillary electrochromatography

Avvaru Praveen Kumar, Jung Hag Park


29. Determination of azide and bromide ions by direct detection using capillary electrophoresis

G. V. Ram Reddy, A. Praveen Kumar, B. Venkateswara Reddy, Jung Hag Park

http://www.informaworld.com/smpp/content~db=all~content=a915828493

Mass Spectrometry

28. Isomeric discrimination and quantification of thyroid hormones, T3 and rT3, by the single ratio kinetic method using electrospray ionization mass spectrometry

Avvaru Praveen Kumar, Hua Jin, Sung-Chan Jo, Changdae Kim, Sang-Ho Nam, Yong-Ill Lee


27. Study of complexes of C2- and C6-dihydroceramides with transition metal ions using electrospray ionization tandem mass spectrometry (ESI-MS/MS)

Jin-Yi Lim, Avvaru Praveen Kumar, Changdae Kim, Chuljin Ahn, Young Jae Yoo, Yong-Ill Lee


26. Determination of enantiomeric compositions of DOPA by tandem mass spectrometry using the kinetic method with fixed ligands

Min-Kwon Lee, Avvaru Praveen Kumar, Dongri Jin, Yong-Ill Lee

25. Kinetic method for enantiomeric determination of thyroid hormone (D,L-thyroxine) using electrospray ionization tandem mass spectrometry (ESI-MS/MS)
Min-Kwon Lee, Avvaru Praveen Kumar, Yong-Ill Lee

24. Investigation on C2-ceramide complexes with transition metal ions using electrospray ionization tandem mass spectrometry
Jin-Yi Lim, Avvaru Praveen Kumar, Yong-Ill Lee
http://www.impublications.com/content/abstract?code=E14_0087

23. Interaction of glutathione and sodium selenite in vitro investigated by electrospray ionization tandem mass spectrometry
Sheng-Yun Cui, Hua Jin, Seung-Jin Kim, Avvaru Praveen Kumar, Yong-Ill Lee
http://jb.oxfordjournals.org/content/143/5/685.abstract

22. Enhanced detection and structural characterization of flavonoids by complexation with N,O-bis(trimethysilyl)trifluoroacetamide using electrospray ionization mass spectrometry
Seung-Jin Kim, Avvaru Praveen Kumar, Yong-Ill Lee
http://www.jstage.jst.go.jp/article/analsci/24/9/24_1177/_article

**Liquid Chromatography–Mass Spectrometry**

Gosula Venkat Ram Reddy, Avvaru Praveen Kumar, Bobba Venkateswara Reddy, Syed Wasimul Haque, Haum Dutt Gauttam, Poonam Kumar, Jung Hag Park
20. Separation, identification and structural elucidation of a new impurity in the drug substance of amlodipine maleate using LC-MS/MS, NMR and IR
Gosula Venkat Ram Reddy, Avvaru Praveen Kumar, Bobba Venkateswara Reddy, Jadi Sreeramulu, Jung Hag Park

19. Identification of degradation products in aripiprazole tablets by LC-QToF mass spectrometry
Gosula Venkat Ram Reddy, Avvaru Praveen Kumar, Bobba Venkateswara Reddy, Poonam Kumar, Ham Dutt Gauttam

18. Trace analysis of tetracycline antibiotics in human urine using UPLC–QToF mass spectrometry
Hua Jin, Avvaru Praveen Kumar, Do-Hyeon Paik, Kwon-Chul Ha, Y.-Jae Yoo, Yong-Ill Lee

17. Application of ion-trap mass spectrometry for identification and structural determination of an unknown impurity in simvastatin
G. V. Ram Reddy, A. Praveen Kumar, B. Venkateswara Reddy, J. Sreeramulu

16. Separation and quantification of key starting materials of irbesartan using liquid chromatography–mass spectrometry as a separation and identification tool
http://www.informaworld.com/smpp/content~db=all~content=a914774289
15. Determination of thyroxine enantiomers in pharmaceutical formulation by high-performance liquid chromatography–mass spectrometry with precolumn derivatization
Dongri Jin, **Avvaru Praveen Kumar**, Goon-Cheol Song, Yong-Ill Lee

**Liquid Chromatography**

14. Development and validation of a chiral liquid chromatographic method for the determination of enantiomeric purity of benzphetamine
N. Y. Sreedhar, E. Rajasekhar, G. V. Ram Reddy, **A. Praveen Kumar**, C. H. Thirupathi, B. Gopi Kalyan Kumar

13. Stability indicating reversed-phase high performance liquid chromatography method for determination of impurities in ofloxacin tablet formulations
Bobba Venkateswara Reddy, **Avvaru Praveen Kumar**, Gosula Venkat Ram Reddy, Mohinish Sahai, Jadi Sreeramulu, Jung Hag Park
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**UV-Visible Spectrophotometry**

12. Simple and simultaneous method for determination of palladium(II) and ruthenium(III) using second order derivative spectrophotometry
**A. Praveen Kumar**, P. Raveendra Reddy, V. Krishna Reddy, Y.I. Lee
[http://www.informaworld.com/smpp/content~db=all~content=a908026346~frm=titlelink](http://www.informaworld.com/smpp/content~db=all~content=a908026346~frm=titlelink)

11. Direct and first derivative spectrophotometric determination of manganese(II) in tap water, milk, alloy steels and plant samples
**A. Praveen Kumar**, P. Raveendra Reddy, V. Krishna Reddy
10. Simultaneous second-derivative spectrophotometric determination of cobalt and vanadium using 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone

A. P. Kumar, P. R. Reddy, V. K. Reddy


http://www.springerlink.com/content/l7l0017362px0153/

9. A rapid, simple, and sensitive spectrophotometric determination of traces of vanadium (V) in foodstuffs, alloy steels, and pharmaceutical, water, soil, and urine samples

Avvaru Praveen Kumar, Papammagari Raveendra Reddy, Vanka Krishna Reddy


http://www.informaworld.com/smpp/content~db=all~content=a793844130~frm=abslink

8. Synthesis of 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone (HMBATSC) and its application for direct and second derivative spectrophotometric determination of palladium(II)

I. Srivani, A. Praveen Kumar, P. Raveendra Reddy, K.P.P.R. Mohan Reddy, V. Krishna Reddy


http://onlinelibrary.wiley.com/doi/10.1002/adic.200790109/abstract?systemMessage=Wiley+Online+Library+will+be+disrupted+14+May+from+10-12+BST+for+monthly+maintenance

7. Spectrophotometric determination of nickel(II) with 2-hydroxy-3-methoxybenzaldehyde thiosemicarbazone

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy


http://nopr.niscair.res.in/bitstream/123456789/2184/1/IJCA%2046A(10)%201625-1629.pdf

6. Direct and second derivative spectrophotometric determination of molybdenum(VI) in food stuffs and in alloy steels using 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone (HMBATSC)

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy

5. Simultaneous determination of cobalt(II) and nickel(II) by fourth-order derivative spectrophotometric method using 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy


4. 2-Hydroxy-3-methoxy benzaldehyde thiosemicarbazone (HMBATSC) as a spectrophotometric reagent for second-derivative spectrophotometric determination of nickel(II) and vanadium(V)

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy


http://direct.bl.uk/bld/PlaceOrder.do?UIN=207846970&ETOC=RN&from=searchengine

3. Direct and derivative spectrophotometric determination of cobalt (II) in microgram quantities with 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy


2. Synthesis and characterisation of 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone (HMBATSC) and its application of simultaneous second order derivative spectrophotometric method for determination of cobalt(II), nickel(II) and vanadium(V)


http://www.informaworld.com/smpp/content~db=jour~content=a780570833~frm=abslink

1. Spectrophotometric determination of Ru(III) using 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone (HMBAT)
Papers presented in Conferences/Seminars/Symposium:

8. Azithromycin as a novel antibiotic chiral selector for enantioseparation by capillary electrophoresis

**A. Praveen Kumar,** Eunju Kim, Minji Kim, Jongseong Hong, Jung Hag Park

7. Cellulose dimethylphenylcarbamate-coated zirconia monolithic columns for enantioseparation by capillary electrochromatography

**Avvaru Praveen Kumar,** Jung Hag Park

6. Enantioseparation of neutral chiral compounds on quinine-immobilized zirconia in reversed-phase capillary electrochromatography

Seungjae Lee, Jong Seong Hong, Eunju Kim, Minji Kim, Jeongmi Lee, **A. Praveen Kumar,** Jung Hag Park
Presented in **Korean Chemical Society regional meeting**, Gyungbuk, **Daegu**, Korea, 2009.

5. Quantitative isomeric analysis of thyroid hormone isomers by a kinetic method using electrospray ionization tandem mass spectrometry

Yong-Ill Lee and **Avvaru Praveen Kumar**

4. Isomeric discrimination and determination of thyroid hormone isomers, T₃ and rT₃ by a single ratio kinetic method using electrospray ionization tandem mass spectrometry (ESI-MS/MS)

**Avvaru Praveen Kumar,** Hua Jin, Yong-Ill Lee
3. Direct and first derivative spectrophotometric determination of Manganese (II) in tap water, milk, alloy steels and plant samples

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy, Y. I. Lee

2. Simultaneous second-derivative spectrophotometric determination of Cobalt(II) and Vanadium(V) using 2-hydroxy–3-methoxy benzaldehyde thiosemicarbazone

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy
Presented in Changwon National University, Changwon, Korea, 2007.

1. Direct spectrophotometric determination of Mo(VI) with 2-hydroxy-3-methoxy benzaldehyde thiosemicarbazone (HMBATSC)

A. Praveen Kumar, P. Raveendra Reddy, V. Krishna Reddy
Presented in “Role of chemistry in emerging areas of biology and industries”, S.K. University, Anantapur, India, 2006.