

# Curriculum Vitae

## Suvaradhan Kanchi, M.Sc., PhD

Associate Professor, Department of Chemistry  
CHRIST (Deemed to be University), Hosur Rd  
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*My research focuses on smart bio-device platforms in biosensor technology. This is achieved by incorporating nanostructured electrode materials into electroactive polymers to design biosensors for environmental, food and health applications. The broader goals are to design, model and fabricate doped smart materials to improve biosensing efficiency. Due to the diagnostic methods not being able to produce reliable results, high level computational tools such as molecular dynamics simulations and molecular docking codes are used as a complementary gear to design novel bio-recognizers from biomacro-molecules.*



## PROFESSIONAL PREFACE

- **Ph.D. in Analytical Chemistry; an accomplished Educator and Researcher** with more than a decade of distinguished global career success in **designing and leading research and development programs and projects across** the strategic priorities; designing positive approaches and proactive interventions advancing learner engagement
- Deft at **conducting the study, research & development, and gathering data** during the project life cycle, analyzing the data, and publishing the findings to aid new research, enrich scholarly literature, and improve the decision-making process
- Championed success in the following functional areas of expertise entailing:
  - **Recognized as a Senior Researcher** in accelerating performances in Novel Method Development and Validation, Project Lead and Execution, and Publications and Filed Patents
  - **Influential Research Fellow:** Dexterously synthesized new nanomaterials and developed a device that detects the hotness of Chilly, this is the first in the world of its kind, Filed a Patent, and expertise in Field-Flow Fractionation techniques
  - **Proactive Research Associate:** Deft at designing novel nanomaterials, adopted biomolecules for sensor development
  - **Post-Doctoral Researcher:** Nanoconfinement of gold nanoparticles. Proficient at the characterization of nanoparticles
- Scientific leader who enjoys challenges, and the ability to multi-task in high-stress environments. Conducts scientific literature searches, and determines techniques, equipment, and methods required to achieve research goals and product launch
- **Noted for cross-functional leadership** with a bottom-line focus on profitability, visibility, and sustainability; disciplined and flexible problem-solving approach to directly impact the success, growth, and profits of an organization

## KEY AREAS OF EMPHASIS

*SMARTPHONE based Sensing Systems | Nanodiagnosics | Computational Chemistry | NanoElectrochemistry | Environmental Chemistry | Green-Nanotechnology | SMART Materials for Device Applications*



## EMPLOYMENT DETAILS

### CHRIST (Deemed to be University), Bengaluru, India | Department of Chemistry

- Associate Professor: February 2023- Till Date

### Sambhram Institute of Technology, Bengaluru, India | Department of Chemistry

- Associate Professor: February 2021- Feb 2023
- Visiting Professor (Sambhram University, Jizzax, Uzbekistan): March 2021 – September 2021

### Durban University of Technology, Durban, South Africa | Department of Chemistry

- Senior Research Fellow: August 2019-July 2021
- Lecturer (Part Time): July 2019 – October 2019
- Research Fellow: August 2016-July 2019
- Research Associate: August 2014 – July 2016
- Lecturer (Part Time): January 2015 – December 2015
- Post-Doctoral Research Fellow: August 2012 – July 2014

### King Abdulaziz University, Jeddah, Saudi Arabia | Department of Chemistry

- Adjunct Researcher: August 2016 – June 2020

### Feng Chia University, Taichung, Taiwan | Department of Material Science & Engineering

- Post-Doctoral Research Fellow: June 2011 – March 2012



## ACADEMIC CREDENTIALS

- **Ph.D. in Analytical Chemistry** from Sri Venkateshwara University Tirupati, India **with 72% marks in 2010**
  - Title of the Thesis: *Monitoring the Status of Trace Metals in Environmental Samples*
  - Research Supervisor: *Prof. N. Venkatasubba Naidu*
- **M.Sc. in Applied Chemistry** from Sri Venkateshwara University Tirupati, India **with 65% marks in 2001**

- **B.Sc. in Chemistry, Physics and Zoology from Sri Venkateshwara University, Tirupati India with 67% marks in 1998**



## RESEARCH SUPERVISION

### PhD (On-going)

- **Calvin Carl Harilal**

- *Title of the thesis:* Development of a metal-organic framework based immunosensor for the detection of lactoferrin
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa

### PhD (Awarded)

- **Kwanele Winter rose Kunene**

- *Title of the thesis:* Electrochemical aptasensor for the detection of Mycotoxins in food samples by experimental and computational methods
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2022

- **Ayyappa Bathinapatla**

- *Title of the thesis:* Development of electrophoretic and biosensor methods applied to high intensity artificial sweeteners
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2015

### MAppSci (Awarded)

- **Lyndon Naidoo**

- *Title of the thesis:* Analysis of nanoscale ingredients in commercial food and cosmetic products by FFF coupled with ICP-MS
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2021

- **Lephalala Matshidiso**

- *Title of the thesis:* Electrochemical enzymatic biosensing of Neotame in sweeteners by experimental and computational Methods
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2021

- **LeeAnn Ramsarup**

- *Title of the thesis:* An Investigation of the Voltammetric behaviour of antioxidants in flavonoids
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2020

- **Calvin Carl Harilal**

- *Title of the thesis:* Development of electrochemical immunosensors for detection of Tau protein: Computational and Experimental studies
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2020

- **Nomnotho Jiyane**

- *Title of the thesis:* Development of a third-generation electrochemical enzyme-based biosensor for a scalable detection of oxygen in power generation cells
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2020

- **Phathisanani Hloma**

- *Title of the thesis:* Development of an electrochemical immunosensor for the detection of steviol glycosides by experimental and computational methods
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2020

- **Kwanele Winter rose Kunene**

- *Title of the thesis:* Fabrication of electrochemical biosensors for the determination of phenolic compounds by Experimental and computational methods
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2018

- **Thabani Mpanza**

- *Title of the thesis:* Determination of capsaicin using carbon nanotubes based electrochemical biosensors
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2016

- **Sne Khulu**

- *Title of the thesis:* Interaction studies of chiral Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) using capillary electrophoresis frontal analysis and electrokinetic chromatography
- *Affiliation:* Department of Chemistry, Durban University of Technology, Durban, South Africa
- *Year of Graduation:* 2016

## PROFESSIONAL ASSOCIATION

- Life Member in Indian Society of Analytical Scientists (ISAS), India.
- Senior Member in Asia-Pacific Chemical, Biological & Environmental Engineering Society, Hong Kong.
- Member, International Association of Engineering (IAENG-141903), Hong Kong.
- Member, Asian Council of Science Editors (91.10072), Dubai (UAE).
- Member, Chemical Consultants Network (User ID: 28848737), Chadds Ford, PA 19317, USA.
- Member, International Association of Advanced Materials (Membership ID: 7999127922), Sweden.
- Member, Applied Chemical Engineering Society (ACES) in International Association for Computer Science and Information Technology (IACSIT: 80350975), Singapore.
- Member, South African Chemical Institute (SACI, Membership No:90263), South Africa.
- Annual Member, Professional Chemist of South Africa (SACI, Membership No:90263), South Africa.
- Annual Member, International Society of Electrochemistry (ISE, Membership No:19339), Switzerland.

## CONFERENCE COMMITTEE MEMBERSHIP

- International Program Committee Member, International Conference on Sensors Engineering and Electronics Instrumental Advances (SEIA-2015), from 21-22 November 2015, Dubai, UAE.
- Member, Organizing Committee, Pharmaceutical Summit and Expo, from 8-10 October 2015, New Delhi, INDIA.
- 2<sup>nd</sup> International Conference on Past and Present Research Systems of Green Chemistry, from 14-16 September 2015 at Florida, USA.
- Journal Review Committee, International Association of Engineering and Technology for Skill Development, from 10-11 December 2014 at Chennai, INDIA.
- International Summit on Past and Present Research Systems of Green Chemistry, from 25-27<sup>th</sup> August 2014 at Philadelphia, USA.
- International Advisory Committee, The 6th International CBRN Safety and Security conference under patronage of The Ministry of Higher Education & Scientific Research, University of Babylon from 14-16 November 2021, Babylon, Hilla, IRAQ.
- 1<sup>st</sup> International Conference on Medical Sciences (Our Health our Future), Al-Mustaqbal University College, from 10-12 November 2019, Babylon, Hilla, IRAQ.
- Scientific Committee, Faculty Research Day, Faculty of Applied Sciences, Durban University of Technology, from 15-16 November 2017, Durban, SOUTH AFRICA.
- International Scientific Committee, International Conference on Alternative Fuels & Energy (ICAF2017), from 23-25 October 2017, Daegu, SOUTH KOREA.
- International Scientific and Peer-Reviewer Board, International Conference on Alternative Fuels: Future and Challenges (ICAF2016), from 2-4 December 2016, Kayseri, TURKEY.
- Technical Committee Member, ALLSENSORS 2016, The First International Conference on Advances in Sensors, Actuators, Metering and Sensing, from 24 - 28, April 2016, Venice, ITALY.

## PROFESSIONAL APPOINTMENTS

### Evaluation of Funding Proposals

- King Fahd University of Petroleum and Minerals, Saudi Arabia
- National Research Foundation (NRF) (South Africa)
- Croatian Science Foundation (hereinafter: HRZZ), European Commission

### Invited Reviewer for PhD/Master Proposals

- Department of Chemistry, Durban University of Technology, South Africa

### Invited Reviewer for Book Proposals

- CRC Press, Taylor & Francis Group; Elsevier; Royal Society of Chemistry; Springer

### Invited Reviewer for Peer-Reviewed Journals

- Journal of Nanotechnology (Hindawi); Journal of Food Quality (Hindawi); Vietnam Journal of Chemistry (Wiley); Bioinorganic Chemistry and Applications (Frontiers); Advances in Natural Sciences: Nanoscience and Nanotechnology (IOP Science), Electroanalysis (Wiley-VCH), ACS Applied Energy Materials (ACS), Heliyon (Elsevier), Green Chemistry Letters and Reviews (Tylor & Francis), Food Analytical Methods (SpringerNature), Karbala International Journal of Modern Science (University of Kerbala), Journal of Pure and Applied Microbiology (Dr. M.N. Khan), Journal of Polymer Research (SpringerNature), Journal of Materials Research and Technology (Elsevier), Current Analytical Chemistry (Bentham Science), Sustainable Chemistry and Pharmacy (Elsevier), Frontiers in Chemical Engineering (Frontiers), Applied Water Science (SpringerNature), Journal of Environmental Management (Elsevier), SN Applied Sciences (SpringerNature), Sensors and Actuators: A. Physical (Elsevier), Veterinary Medicine and Science (Wiley-VCH), Bulletin of the Chemical Society of Ethiopia (African Journals Online), Chemical Engineering Journal (Elsevier), Materials Performance and Characterization (ASTM International), Scientific Reports (SpringerNature), Journal of Drug Delivery Science and Technology (Elsevier), Journal of Nanostructure in Chemistry (Springer), International Journal of Biological Macromolecules (Elsevier), Separation Science and Technology (Tylor & Francis), NANO (World Scientific), Plant Cell Biotechnology and Molecular Biology (International Knowledge Press), Chemical Papers (SpringerNature), Chemosphere (Elsevier), Preparative Biochemistry & Biotechnology (Tylor & Francis), Journal of Natural Fibers (Tylor & Francis), Journal of King Saud University-Science (Elsevier), Solar Energy (Elsevier), Spectroscopy Letters (Tylor & Francis), Nanotechnology, Science and Applications (Dove Medical Press), IEEE Sensors Journal (IEEE), Science of the Total Environment (Elsevier), South African Journal of Chemistry (SACI), Artificial Cells, Nanomedicine and Biotechnology (Tylor & Francis), Chemical Engineering & Technology (Wiley-VCH),

Journal of Separation Science (Wiley-VCH), Ceramics International (Elsevier), Indian Journal of Biochemistry and Biophysics (NISCAIR), International Journal of Hydrogen Energy (Elsevier), ACS Sustainable Chemistry & Engineering (ACS), Journal of Photochemistry & Photobiology, B: Biology (Elsevier), Drug and Chemical Toxicology (Tylor & Francis), International Biodeterioration & Biodegradation (Elsevier), Polymer Composites Journal (Wiley-VCH), Biotechnology Letters (SpringerNature), Nanomedicine (Nature), Journal of Agricultural and Food Chemistry (ACS), Bioprocess and Biosystems Engineering (SpringerNature), Environmental Chemistry Letters (SpringerNature), Research on Chemical Intermediates (SpringerNature), Analyst (RSC), Journal of the Iranian Chemical Society (SpringerNature), Journal of Environmental Engineering and Landscape Management (Tylor & Francis), Journal of Applied Biomedicine (Elsevier), Journal of The Electrochemical Society (The Electrochemical Society); Photochemical & Photobiological Sciences (RSC), RSC Advances (RSC), Ionics (SpringerNature), Journal of Advanced Research (Elsevier), Advances in Nanoparticles (Scientific Research Publishing), Analytical Letters (Tylor & Francis), Journal of Analytical Science and Technology (SpringerNature), International Journal of Environmental Analytical Chemistry (Tylor & Francis), Journal of Nanomaterials (Hindawi), Applied Surface Sciences (Elsevier), Journal of Sulfur Chemistry (Tylor & Francis), Desalination and Water Treatment (Tylor & Francis), International Journal of Agricultural Research and Policy (Journal Issues), Toxicology and Environmental Chemistry (Tylor & Francis), African Journal of Biotechnology (Academic Journals), Arabian Journal of Chemistry (Elsevier). Frontiers in Chemistry (Frontiers), Materials Today: Proceedings (Elsevier), Energy Sources, Part A: Recovery, Utilization, and Environmental Effects (Tylor & Francis), BioMed Research International (Hindawi), Journal of Analytical Methods in Chemistry (Hindawi), Journal of Experimental Nanoscience (Tylor & Francis), Journal of Molecular Liquids (Elsevier), Water Science and Technology (IWA Publishing), Nutrition and Cancer: An International Journal (Tylor & Francis), Journal of Cluster Science (SpringerNature), Polish Journal of Chemical Technology (DE GRUYTER), Microbial Pathogenesis (Elsevier).

#### Editorial Board Member

- **Asian Journal of Chemistry**, Impact Factor<sub>2019</sub>: 0.31, Asian Publication Corporation, ISSN: 0975-427X (Online), ISSN: 0970-7077 (Print) (<http://www.asianjournalofchemistry.co.in/User/Journal/editorialboard.aspx>).
- **Current Analytical Chemistry**, Impact Factor<sub>2019</sub>: 1.365 (SCI, Ranks 67 out of 84 Analytical Chemistry Journals), Bentham Science, ISSN: 1875-6727 (Online). ISSN: 1573-4110 (Print) (<https://benthamscience.com/journals/current-analytical-chemistry/editorial-board/>).
- Review Editor (Separation Processes), **Frontier in Chemical Engineering**, Impact Factor<sub>2018</sub>: 3.63, Frontiers Publishers, ISSN: 2673-2718 (Online). (<https://www.frontiersin.org/journals/chemical-engineering#editorial-board/>).

#### Guest Editor

- **Special Issue: Green approaches for the synthesis of nanomaterials**
  - Eds: Nagaraju Kottam, Pritam Kumar Dikshit, Muhmmad Ikram, Christian Julien, Syed Mahmood, Shakeel Ahmed Khan, Hyunook Kim, **Suvaradhan Kanchi**, Jelili Abiodun Badmus
  - Journal: Frontiers in Chemistry (Green and Sustainable Chemistry)
  - Publisher: Frontiers
  - <https://www.frontiersin.org/research-topics/38326/hot-topic-green-approaches-for-the-synthesis-of-nanomaterials>
- **Special Issue: Bioelectronics and Related Applications in Nanoscale**
  - Eds: Krishna Bisetty, Suvaradhan Kanchi
  - Journal: nanomaterials
  - Publisher: MDPI
  - [https://www.mdpi.com/journal/nanomaterials/special\\_issues/nano\\_bioelectronic](https://www.mdpi.com/journal/nanomaterials/special_issues/nano_bioelectronic)
- **Special Issue: Sustainable nanomaterials: Electrochemical applications to Food, Health, Energy and Environmental remediation**
  - Eds: Suvaradhan Kanchi, Ayyappa Bathinapatla, Rajasekhar Chokkareddy, Krishna Bisetty, Mikhael Bechelany
  - Journal: International Journal of Electrochemical Science
  - Publisher: Elsevier



#### ACCOLADE AND RECOGNITION

- World's top 2% Scientists 2021 by Stanford University, USA.
- Best Teacher Award for 2022 at Sambhram Institute of Technology, Bengaluru, India
- Recognized as the **Top Impact Author's Award** for 2020 at Durban University of Technology, South Africa
- Bagged **Top University Publisher Award** for 2016 at Durban University of Technology, South Africa
- Received **Best Paper Award** in International Conference on Advanced materials (SCICON '16), held at Amrita Vishwa Vidhyapeetam from 19-21 December 2016, Coimbatore, India
- Rewarded with **Top University Publisher Award** for 2015 at Durban University of Technology, South Africa
- Out Standing **Research Associate Award** for 2016 by the Faculty of Applied Sciences, Durban University of Technology, S.A.
- Awarded with **Top University Publisher Award** for 2014 at Durban University of Technology, South Africa.



#### LIST OF PROJECTS

- **Biogenic synthesis of Selenium nanoparticles with edible mushroom extract: Evaluation of cytotoxicity on prostate cancer cell lines and their antioxidant, and antibacterial activity**
  - *Investigator(s)*: Inamuddin (PI); Suvaradhan Kanchi (Co-PI)
  - *Funding Source*: King Abdulaziz University, Kingdom of Saudi Arabia
  - *Grant Number*: G: 168-130-1441
  - *Project Amount*: 45000.00 Saudi Riyals (Rs: 9,70,000.00)

- *Status/Year: Completed/2020*
- **Colocasia Esculenta extract based silver nanoparticles as green colorimetric probe for the detection of melamine in milk products**
  - *Investigator(s): Inamuddin (PI); Suvardhan Kanchi (Co-PI)*
  - *Funding Source: King Abdulaziz University, Kingdom of Saudi Arabia*
  - *Grant Number: D-054-1301440*
  - *Project Amount: 30000.00 Saudi Riyals (Rs: 6,50,000.00)*
  - *Status/Year: Completed/2019*
- **Rapid detection of Amygdalin in apple seeds by novel pproach with the combination of f-MWCNTs/CoFe<sub>2</sub>O<sub>4</sub>**
  - *Investigator(s): Inamuddin (PI); Suvardhan Kanchi (Co-PI)*
  - *Funding Source: King Abdulaziz University, Kingdom of Saudi Arabia*
  - *Grant Number: G:271-130-1440*
  - *Project Amount: 45000.00 Saudi Riyals (Rs: 9,70,000.00)*
  - *Status/Year: Completed/2019*
- **Improvement and commercialization of a biosensor for the detection of capsaicin in food materials**
  - *Investigator(s): Krishna Bisetty (PI); Suvardhan Kanchi (Researcher)*
  - *Funding Source: Technology Innovation Agency (TIA), South Africa*
  - *Grant Number: 5538/01*
  - *Project Amount: 495000.00 Rands (Rs: 20,00000.00)*
  - *Status/Year: Completed/2021*
- **Field Flow Fractionation coupled to Ultra-High Performance Liquid Chromatography coupled with Inductively Coupled Plasma-Mass Spectrometer and Dynamic Light Scattering Detector**
  - *Investigator(s): Krishna Bisetty (PI); Suvardhan Kanchi (Researcher)*
  - *Funding Source: National Research Foundation (NRF) & Durban University of Technology, South Africa*
  - *Project Amount: 11,200,000.00 Rands (Rs: 50500000.00)*
  - *Status/Year: Commissioned/2018*

## CITATION MATRICS

- [https://scholar.google.co.za/citations?user=w6\\_hyNQAAAAJ&hl=en](https://scholar.google.co.za/citations?user=w6_hyNQAAAAJ&hl=en)
- [https://www.researchgate.net/profile/S\\_Kanchi](https://www.researchgate.net/profile/S_Kanchi)
- <https://www.mendeley.com/profiles/suwardhan-kanchi2/>
- <https://loop.frontiersin.org/people/735375/overview>
- <https://publons.com/researcher/443754/suwardhan-kanchi/>
- URL: <http://livedna.org/91.10072>

<b>Database</b>	<b>Citations</b>	<b>h-index</b>
Google Scholar	2762	25
Scopus	1892	20
Web of Science	1813	20
ResearchGate	2285	22
Last Five Years Impact Factor	225.101	
Cumulative Impact Factor	290.350	

**[Refer to the annexure for a list of selected paper publications, papers presented at seminars and workshops](#)**





1. Sandhya Punyasamudram, Reddy Prasad Puthalapattu, Ayyappa Bathinapatla, **Suvaradhan Kanchi\***, S. Jyothi, Nagendra Kumar Putta Venkata., "Biosynthesis of ZnFe<sub>2</sub>O<sub>4</sub>@Ag Hybrid Nanocomposites for degradation of 2,4-Dichlorophenoxyacetic Acid Herbicide". *Chemical Physics Impact* (2023): 100282 [SCI & ISI, IF<sub>2023</sub>: 2.2] <https://doi.org/10.1016/j.chphi.2023.100282>
2. Ayyappa Bathinapatla, **Suvaradhan Kanchi\***, Rajasekhar Chokkareddy, Reddy Prasad Puthalapattu, Mulpuri Ravi Kumar. "Recent trends in the electrochemical sensors on  $\beta$ - and calcium channel blockers for hypertension and angina pectoris: A comprehensive review". *Microchemical Journal* (2023): 192, 108930 [SCI & ISI, IF<sub>2021</sub>: 5.304] <https://doi.org/10.1016/j.microc.2023.108930>
3. Nilima Patil, R. B. Dhake, Raju Phalak, Umesh Fegade, Inamuddin, Mu. Naushad, Chinna Bathula, **Suvaradhan Kanchi**, Krishna Govender. "A Colorimetric Chemosensor for Distinct Color Change with (E)-2-(1-(3-Aminophenyl)ethylideneamino)benzenethiol to detect Cu<sup>2+</sup> in Real Water Samples". *Analytical Sciences* (2023): 39, 1413-1423, [SCI & ISI, IF<sub>2021</sub>: 1.967] <https://doi.org/10.1007/s44211-023-00355-z>
4. Reddy Prasad Puthalapattu, Sandhya Punyasamudram, Ayyappa Bathinapatla, Nagendra Kumar Putta Venkata, **Suvaradhan Kanchi\***. "Electrochemical non-enzymatic strategy with green synthesized Fe<sub>2</sub>O<sub>3</sub>-CuO nanocomposite for detection of Amiprofos-methyl herbicide in industrial effluents and soils". *Chemical Physics Impact* (2023): 6, 100195. [SCI & ISI, IF<sub>2023</sub>: 2.2] <https://doi.org/10.1016/j.chphi.2023.100195>
5. Rajasekhar Chokkareddy, Joan Chepkoech Kilele, **Suvaradhan Kanchi\***, Gan G Redhi. "Electrochemical Sensors for the Detection of Anti-Asthma Drugs in Pharmaceutical and Biological Fluids: A Review." *Current Analytical Chemistry*, (2023): 19(3), 220-239. [SCI & ISI, IF<sub>2021</sub>: 2.374] <https://doi.org/10.2174/1573411019666230117152951>.
6. Ganesh Jethave, Inamuddin, Umesh Fegade, Tariq A Altalhi, **Suvaradhan Kanchi** and Rajesh Dhake. "Double-layer Modelling and Physicochemical Parameters Interpretation for Chromium Adsorption on ZnMnOAC Nanocomposite". *Inorganic and Nano-Metal Chemistry* (2023): (53(3), 228-238 [SCI & ISI, IF<sub>2020</sub>: 1.716] <https://doi.org/10.1080/24701556.2022.2034010>.
7. Kwanele Kunene, Syreina Sayegh, Matthieu Weber, Myalowenkosi Sabela, Damien Voiry, Igor Iatsunskyi, Emerson Coy, Suvaradhan Kanchi, Krishna Bisetty, Mikhael Bechelany. "Smart Electrochemical Immunosensing of Aflatoxin B1 Based on a Palladium Nanoparticle-Boron Nitride-Coated Carbon Felt Electrode for the Wine Industry". *Talanta* (2023):253, 124000 [SCI & ISI, IF<sub>2021</sub>: 6.556] <https://doi.org/10.1080/24701556.2022.2034010>.
8. Umesh Fegade, Inamuddin, Tariq Altalhi, **Suvaradhan Kanchi**, Kiran E. Suryawanshi, Kalpesh A. Isai, M. S. Sonawane, Bhojraj Barhate. "Double-layer Statistical Modeling of Ultrasound-assisted Adsorption of Rhodamine Base on Pb<sub>0.19</sub>Mn<sub>0.63</sub>O<sub>1.61</sub> Alloy Nanoparticles". *Inorganic and Nano-Metal Chemistry* (2022) (Accepted) [SCI & ISI, IF<sub>2020</sub>: 1.716] <https://doi.org/>
9. Patil, Nilima, R. B. Dhake, Umesh Fegade, Kannan Gokulakrishnan, Chennan Ramalingan, Inamuddin, Tariq Altalhi, and **Suvaradhan Kanchi**. "N'-(4-(diethylamino)-2-hydroxybenzylidene) isonicotinohydrazide based chemosensor for nanomolar detection of Ni (II) ion." *International Journal of Environmental Analytical Chemistry* (2021): 1-17. [SCI & ISI, IF<sub>2020</sub>: 2.826] <https://doi.org/10.1080/03067319.2021.1967339>.
10. Fegade, Umesh, Inamuddin, Tariq Altalhi, Mohd Imran Ahamed, and **Suvaradhan Kanchi**. "Effective adsorption of Fuchsine dye on FeZnOAC: kinetic, isotherm, double-layer modelling and reusability study." *International Journal of Environmental Analytical Chemistry* (2021): 1-17. [SCI & ISI, IF<sub>2020</sub>: 2.826] <https://doi.org/10.1080/03067319.2021.1917559>.
11. Fegade, Umesh, Ganesh Jethave, Sanjay Attarde, Sachin Kolate, Inamuddin, Tariq Altalhi, and **Suvaradhan Kanchi**. "Statistical Physics Model of EBT Adsorption on Pb (II) doped Zinc Oxide Nanoparticles: Kinetics, Isotherm and Reuse Study." *International Journal of Environmental Analytical Chemistry* (2021): 1-15. [SCI & ISI, IF<sub>2020</sub>: 2.826] <https://doi.org/10.1080/03067319.2021.1907358>.
12. Khethiwe Mthiyane, Gloria Ebube Uwaya, Maryam Amra Jordaan, **Suvaradhan Kanchi** and Krishna Bisetty. "Insights into the Design of An Enzyme Free Sustainable Sensing Platform for Efavirenz". *Catalysts* (2022): 12, 830 [SCI & ISI, IF<sub>2020</sub>: 4.501] <https://doi.org/10.3390/catal12080830>
13. Ayyappa Bathinapatla, Govinda Gorle, Suvaradhan Kanchi, Reddy Prasad Puthalapattu, Yong Chien Ling. "An ultra-sensitive Laccase/Polyaziridine-Bismuth Selenide Nanoplates modified GCE for detection of atenolol in pharmaceuticals and urine samples". *Bioelectrochemistry* (2022):147, 108212 [SCI & ISI, IF<sub>2021</sub>: 5.760] <https://doi.org/10.1016/j.bioelechem.2022.108212>
14. Gorle, Govinda, Ayyappa Bathinapatla, **Suvaradhan Kanchi**, Yong Chien Ling, and Mashallah Rezakazemi. "Low dimensional Bi<sub>2</sub>Se<sub>3</sub> NPs/reduced graphene oxide nanocomposite for simultaneous detection of L-Dopa and acetaminophen in presence of ascorbic acid in biological samples and pharmaceuticals." *Journal of Nanostructure in Chemistry* (2022): 12, 513-528. [SCI & ISI, IF<sub>2021</sub>: 8.000] <https://doi.org/10.1007/s40097-021-00428-3>.
15. Rajasekhar Chokkareddy, **Suvaradhan Kanchi\***, Inamuddin, Tariq A Altalhi. Smart Nanodevices for Point-of-Care Applications." *Current Analytical Chemistry*, (2022): 18(4), 415-429. [SCI & ISI, IF<sub>2021</sub>: 2.374] <https://doi.org/10.2174/1573411017999210120180646>.

16. Rajasekhar Chokkareddy, **Suvaradhan Kanchi\***, Inamuddin. "A Mini Review on Surface Enhanced Raman Scattering based Nanoclusters for Sensing and Imaging Applications." *Current Analytical Chemistry*, (2022): 18(4), 430-439. [SCI & ISI, IF<sub>2021</sub>: 2.374] <https://doi.org/10.2174/1573411017999210101162831>.
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  77. Bathinapatla, Ayyappa, **Suvaradhan Kanchi**, Parvesh Singh, Myalowenkosi I. Sabela, and Krishna Bisetty. "Determination of Neotame by High-Performance Capillary Electrophoresis Using  $\beta$ -cyclodextrin as a Chiral Selector." *Analytical Letters* 47, no. 17 (2014): 2795-2812. [SCI & ISI, IF<sub>2014</sub>: 1.019] <http://dx.doi.org/10.1080/00032719.2014.924008>
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  81. **Kanchi S.**, K. Saraswathi, and N. Venkatasubba Naidu. "Voltammetric method for manganese analysis in Indian traditional leafy vegetables and medicinal plants collected around Tirupati town, a famous pilgrim center in India: the catalytic hydrogen wave (CHW) technique." *Food Analytical Methods* 5, no. 1 (2012): 69-81. [SCI & ISI, IF<sub>2012</sub>: 2.375] <http://dx.doi.org/doi/10.1007/s12161-011-9211-7>

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## LIST OF PATENTS

- Inventors: Ayyappa Bathinapatla, Govinda Gorle, **Suvardhan Kanchi**, Yong Chien Ling  
Title: SYNTHESIS OF REDUCED GRAPHENE OXIDE (rGO) BISMUTH SELENIIDE NANOPATES (Bi<sub>2</sub>Se<sub>3</sub> NPs) COMPOSITE AND ITS PHOTOCATALYTIC PERFORMANCE  
Patent Number: 202241056687  
Country of Patent: India
- Inventors: Puthalapattu Reddy Prasad, Punyasamudram Sandhya, Bathinapatla Ayyappa, **Kanchi Suvardhan**, Gumma Supriya  
Title: A FACILE GREEN SYNTHESIS APPROACH FOR Fe<sub>2</sub>O<sub>3</sub>-CuO NANOPARTICLES COMPOSITE AND ITS SENSOR APPLICATIONS  
Patent Number: 202241052454  
Country of Patent: India
- Inventors: Ayyappa Bathinapatla, Govinda Gorle, **Suvardhan Kanchi**, Yong Chien Ling  
Title: A FACILE SYNTHESIZING METHOD FOR LACCASE ENCUMBERED POLYAZIRIDINE-BISMUTH SELENIIDE NANOPATES (Bi<sub>2</sub>Se<sub>3</sub> NPs) COMPOSITE AND IT'S SENSOR APPLICATIONS  
Patent Number: Filed  
Country of Patent: India
- Inventors: Nagaraju Kottam, Sampath Chinnam, Smrithi Sailaja Prasannakumaran Nair, Ahmad Salawi, **Suvardhan Kanchi**, A. Mushira Banu, Muktha H, R. Sharath  
Title: NOVEL CARBON DOTS DERIVED BETA VULGARIS AS POTENTIAL ANTI-CANCER AND ANTIOXIDANT AGENTS  
Patent Number: 202241030127 A  
Country of Patent: India
- Inventors: Sabela Myalowenkosi I, **Kanchi Suvardhan**, Mpanza Thabani, Bisetty Krishna  
Title: AN APTAMER, A METHOD OF PRODUCING AN ELECTROCHEMICAL APTASENSOR, AN APTASENSOR, AND AN APTASENSOR SYSTEM  
Patent Number: P78572ZA00  
Country of Patent: South Africa



## LIST OF BOOKS/BOOK CHAPTERS

### Books

- Kanchi, S.**, Rajasekhar, C. and Rezakazemi, M. eds., 2022. *Smart Nanodevices for Point-of-Care Applications*. CRC Press.
- Anand, K., Saravanan, M., Chandrasekaran, B., **Kanchi, S.**, Panchu, S.J. and Chen, Q.S. eds., 2021. *Handbook on Nanobiomaterials for Therapeutics and Diagnostic Applications*. Elsevier.
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- Inamuddin, A.M., Asiri, A. and **Suvardhan, K.**, 2019. *Green Sustainable Process for Chemical and Environmental Engineering and Science*. Elsevier.
- Ahmed, S., **Kanchi, S.** and Kumar, G. eds., 2018. *Handbook of Biopolymers: Advances and Multifaceted Applications*. CRC Press.
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9. Ahmed, S., Ikram, S., **Kanchi, S.** and Bisetty, K. eds., 2018. *Biocomposites: Biomedical and environmental applications*. CRC Press.
10. **Kanchi, S.**, Sagrado, S., Sabela, M.I. and Bisetty, K. eds., 2017. *Capillary Electrophoresis: Trends and Developments in Pharmaceutical Research*. CRC Press.

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1. Chokkareddy, R., ChepkoechKilele, J., **Kanchi, S.**, Redhi, G.G., Kabane, B. and Katari, N. K., 2023. Novel magnetic nanocomposites and their environmental applications. In *Magnetic Nanoparticles and Polymer Nanocomposites* (pp. 1-13). Elsevier.
2. Chokkareddy, R., **Kanchi, S.**, Thakur, S. and Hussein, F.H., 2021. Advanced applications of green materials in biosensor. In *Applications of Advanced Green Materials* (pp. 33-75). Woodhead Publishing.
3. Chokkareddy, R., **Kanchi, S.**, Thakur, S. and Venkatasubba Naidu, N., 2021. Smartphone based biosensors on lateral flow assay coupled to SERS: Point-of-Care applications. In *SERS based biosensing* (pp. 191-212). Bentham Science Publishers.
4. Murti, B.T., Putri, A.D., Irham, L.M., Perwitasari, D.A., Hsieh, C.M., Yang, P.K., **Kanchi, S.** and Sabela, M., 2020. Current trends, achievements, and prospects of smart nanodevices in the global pharma market. In *Nanomaterials in Diagnostic Tools and Devices* (pp. 351-393). Elsevier.
5. **Kanchi, S.** and Thakur, S., 2021. Recent Trends in Graphene Oxide-Enabled Nanocomposites for Sensing Applications. In *Handbook of Polymer and Ceramic Nanotechnology* (pp.241-279). Springer.
6. Chokkareddy, R., Thondavada, N., Thakur, S. and **Kanchi, S.**, 2019. Cholesterol-Based Enzymatic and Nonenzymatic Sensors. In *Advanced Biosensors for Health Care Applications* (pp. 315-339). Elsevier.
7. Chokkareddy, R., Thondavada, N., Thakur, S. and **Kanchi, S.**, 2019. Recent trends in sensors for health and agricultural applications. In *Advanced Biosensors for Health Care Applications* (pp. 341-355). Elsevier.
8. Rajasekhar, C. and **Kanchi, S.**, 2018. Green nanomaterials for clean environment. In *Handbook of Ecomaterials* (pp. 63-79). Springer.
9. **Kanchi, S.** and Bisetty, K., 2018. Special Properties of Nanomaterials for Chromatography. In *Nanomaterials in Chromatography* (pp. 37-54). Elsevier.
10. Sharma, D., **Kanchi, S.** and Sabela, M., 2018. Bionanomaterials as Emerging Sensors in Environmental Management. In *Nanotechnology in Environmental Science* (pp.515-542). Wiley.
11. **Kanchi, S.**, Sabela, M.I. and Bisetty, K., 2018. Analytical Applications of Nanoscale Materials for Water Treatment: A Review. In *Nanotechnology in Environmental Science* (pp.71-124). Wiley.
12. Shahbaaz, M., **Kanchi, S.**, Sabela, M. and Bisetty, K., 2018. Role of Computational Tools in Designing Enzymatic Biosensors for the Detection of Pesticides in Environment. In *Nanocomposites for Pollution Control* (pp.287-312). CRC Press.
13. **Kanchi, S.**, Sabela, M., Bisetty, K. and Nuthalapatib, V.N., 2018. Core-Shell Quantum Dots: Sensing Applications. In *Nanocomposites for Pollution Control* (pp.313-329). CRC Press.
14. Putri, A.D., Tri Murti, B., Sabela, M., **Kanchi, S.** and Bisetty, K., 2017. *Nanopolymer chitosan in cancer and Alzheimer biomedical application* (pp. 311-359). Wiley-Scrivener, USA.
15. **Kanchi, S.**, Adsorption and ion exchange: basic principles and their application in food processing. *Materials Research Foundations, 15*.
16. Sabela, M., **Kanchi, S.**, Sharma, D. and Bisetty, K., 2017. Molecular Simulation of Chiral Selector-Enantiomer Interactions through Docking: Antimalarial Drugs as Case Study. In *Capillary Electrophoresis* (pp. 363-384). Jenny Stanford Publishing.
17. **Kanchi, S.**, Sabela, M., Sharma, D. and Bisetty, K., 2017. A Mini-Review on Enantiomeric Separation of Ofloxacin using Capillary Electrophoresis: Pharmaceutical Applications. In *Capillary Electrophoresis* (pp.117-146). Jenny Stanford Publishing.
18. **Kanchi, S.**, Sabela, M., Venkatasubba Naidu, N. and Bisetty, K., 2017. Chitosan: A Promising Biosensing, Adsorbent Material for Heavy Metals. In *Natural Polymers: Their Derivatives, Blends and Composites Volume-II* (pp.17-36). Nova Science Publishers, Inc, USA.
19. Sharma, D., **Kanchi, S.**, Bisetty, K. and Nuthalapati, V.N., 2016. Perspective on Analytical Sciences and Nanotechnology. In *Advanced Environmental Analysis: Applications of Nanomaterials* (pp. 1-34). Royal Society of Chemistry, UK.
20. Bathinapatla, A., **Kanchi, S.**, Sabela, M.I. and Bisetty, K., 2015. Theoretical principles and applications of high performance capillary electrophoresis. In *Capillary Electrophoresis (CE): Principles, Challenges and Applications; Reed, C., Ed* (pp.193-229). Nova Science Publishers, Inc, USA.



#### LIST OF SELECTED PAPERS PRESENTED AT CONFERENCES/INSTRUMENTAL TRAINING

##### Conferences

1. Krishna Bisetty, **Suvaradhan Kanchi**, "A Computational Investigation into the Selectivity of Enzymatic Biosensing of Sweeteners", *Virtual Conference on Chemistry and its Applications* held at Personal Chair in Computational Chemistry, University of Mauritius from 01-31 August 2020, Mauritius.
2. **Suvaradhan Kanchi**, "Biosensors in Health Applications", presented as a KEYNOTE SPEAKER in *The First International Medical Sciences Conference 2020* held at Al-Mustaqbal University College, Babylon, Hilla from 28-30 June 2020, Baghdad, Iraq.
3. **Suvaradhan Kanchi**, Ayyappa Bathinapatla, Myalowenkosi Sabela, Krishna Bisetty, "A high performance electrochemical biosensor for the detection of sucralose in food samples", *70<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, at International Conference Centre (ICC) from 04-09 August 2019, Durban, South Africa.
4. Phathisanani Hloma, Myalowenkosi Sabela, **Suvaradhan Kanchi**, Krishna Bisetty, "Development of an electrochemical immunosensor for the detection of steviol glycosides by experimental and computational methods", *70<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, at International Conference Centre (ICC) from 04-09 August 2019, Durban, South Africa.



5. Kwanele Kunene, Myalowenkosi Sabela, **Suvaradhan Kanchi**, Krishna Bisetty, Mikhael Bechelany “**Label-free electrochemical immunosensor for sensitive detection of ochratoxine A in coffee**”, *70<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, at International Conference Centre (ICC) from 04-09 August 2019, Durban, South Africa.
6. **S. Kanchi**, P. Hloma, Krishna Bisetty, “**Characterization studies of ZnONPs by asymmetric field flow fractionation coupled with inductively coupled plasma-mass spectroscopy**”, *Nanotechnology Symposium Platform 2018* hosted by College of Health Sciences, University of KwaZuluNatal at Senate Chamber, University of KwaZuluNatal, Westville Campus on 09 October 2018, Durban, South Africa.
7. Deepali Sharma, Myalowenkosi I. Sabela, **Suvaradhan Kanchi**, Krishna Bisetty, Adam A. Skelton and Bahareh Honarparvar, “**Green synthesis, characterization and electrochemical sensing of silymarin by ZnO nanoparticles: Experimental and DFT studies**”, *International Inorganic Chemistry Conference 2018* hosted by University of Nairobi at Best Western Plus Meridian Hotel from 22-24 May 2018, Nairobi, Kenya.
8. L. Madhura, S. Singh, **S. Kanchi** and K. Bisetty, “**Using a QSAR Model to Remove Selected Pesticides from Wastewater Treatment Plants**”, *International Conference on Pure and Applied Chemistry 2018-Chemistry for a Clean and Healthy Planet (ICPAC2018)*”, hosted by Department of Chemistry, University of Mauritius at Sofitel Mauritius L’Imperial Resort & Spa from 2-6 July 2018, Mauritius.
9. Christian L. Mthembu, Myalowenkosi I. Sabela, Mbuso Mlambo, Lawrence M. Madikizela, **Suvaradhan Kanchi**, Halalisani Gumede and Phumlane S. Mdluli, “**A Quick Response and Google Analytics Advancement of Gold Nanoparticle-Based Dual Lateral Flow Immunoassay for Malaria – (pLDH)**”, *International Inorganic Chemistry Conference 2018* hosted by University of Nairobi at Best Western Plus Meridian Hotel from 22-24 May 2018, Nairobi, Kenya.
10. Krishna Bisetty, Athika Darumas Putri, Bayu Tri Murti, **Suvaradhan Kanchi**, Myalowenkosi I Sabela, “**Fabrication of graphene based aptasensors for early detection of prostate cancer by experimental and computational techniques**”, *NanoAfrica – 2018* hosted by South African Nanotechnology Initiative (SANi) at Salt Rock Hotel from 22-25 April 2018, Durban, South Africa.
11. K. Kunene, M. Sabela, **S. Kanchi**, R. Viter, D. Erts, K. Bisetty, “**Hydrothermal Synthesis and Characterization of Zinc Oxide Nanorods**”, *NanoAfrica – 2018* hosted by South African Nanotechnology Initiative (SANi) at Salt Rock Hotel from 22-25 April 2018, Durban, South Africa.
12. **Suvaradhan Kanchi**, “**Biosensors in Food Applications**”, presented as a KEYNOTE SPEAKER in *Ibn Al-Haitham 1<sup>st</sup> International Conference 2017* held at Al-Mansour Melia Hotel from 13-14 December 2017, Baghdad, Iraq.
13. K. Kwanele **S. Kanchi**, M.I. Sabela, Roman Viter, Donats Erts, Krishna Bisetty, “**Molecular imprinted polypyrrole modified ZnO nanorods as photochemical sensors for the detection of Bisphenol S**”, presented in *Faculty Research Day* held at ICC on 11 December 2017, Durban, South Africa.
14. K Bisetty, A Darumas, B Tri Murti, M Sabela, **S. Kanchi**, A Tiwari, “**Computational Modeling to support the development of biosensing devices**”, presented in *CHPC National Conference 2017* held at Velmoré Hotel Estate from 3-7 December 2017, Pretoria, South Africa.
15. Lavanya Madhura, Shalini Singh, **Suvaradhan Kanchi**, Krishna Bisetty, “**Removal of selected pesticides from wastewater treatment plants: A QSAR model**”, presented in *RESEARCH SUMMIT 2017* held at ICC on 01 December 2017, Durban, South Africa.
16. Krishna Bisetty, Kwanele Kunene, Myalowenkosi Sabela, **Suvaradhan Kanchi**, “**Smart Electrochemical Signaling of Bisphenol A with Silver-doped ZnO on Screen Printed Electrodes**”, presented in *NANOTECHNOLOGY 2017* held at Department of Physics, Aristotle University of Thessaloniki from 4-7 July 2017 in Thessaloniki, Greece.
17. **Suvaradhan Kanchi**, Keval Balgobind, Deepali Sharma, Krishna Bisetty, Myalowenkosi I. Sabela, “**Hybrid of ZnONPs/MWCNTs for electrochemical detection of aspartame in food and beverage samples**”, presented in *International Conference on Advanced Materials (SCICON’16)* held at Amirta Vishwa Vidhyapeetam from 19-21 December 2016, Coimbatore, India.
18. **S. Kanchi**, D. Sharma, M.I. Sabela, P. Mdluli, K. Bisetty, “**Emerging biosensing research at DUT**” present in *Ethekwini Municipality University Research Symposium (EURS 2016)*, held at ICC Durban from 5-6 April 2016, Durban, South Africa.
19. Thabani Mpanza, Myalowenkosi Innocent Sabela, **Suvaradhan Kanchi**, and Krishna Bisetty, “**Electro-oxidation of capsaicin by glucose oxidase enzyme on a multi walled carbon nanotubes based glassy carbon electrode**”, presented in *World congress and expo on Materials Science and polymer engineering*, held at Dubai Deira Crown Plaza from 26-28 November 2015, Dubai, UAE.
20. **Suvaradhan Kanchi**, Deepali Sharma, Myalowenkosi Innocent Sabela, Krishna Bisetty, “**Green synthesis of silver nanoparticles using green energy waste: Characterization and antibacterial activity**”, Presented in *Second International Conference on Composite Biocomposite and Nanocomposite (ICCBN-2015)*, held at Department of Mechanical Engineering, Durban University of Technology from 28 – 30 October 2015, Durban, South Africa.
21. Deepali Sharma, **Suvaradhan Kanchi**, Gulshan Singh, Pumlani Mdluli, Krishna Bisetty, “**A Greener Biosynthetic Route for the Rapid Synthesis of ZnO Nanoparticles**”, presented in 42<sup>nd</sup> National Convention of the South African Chemical Institute (SACI), held at Elangeni Hotel from 29 November-4 December 2015, Durban, South Africa.
22. K. Bisetty, A. Bathinapatla, **S. Kanchi**, P. Singh, M.I. Sabela. “**An electrochemical biosensor based on Cyt-C/GO-AuNPs/MWCNT modified Pt electrode for determination of Rebaudioside-A**”, presented in *Advanced Materials World Congress 2015*, held at Stockholm from 23-26 August 2015, Sweden.

23. Ayyappa Bathinapatla, **Suvaradhan Kanchi**, Parvesh Singh, Myalowenkosi I. Sabela, Krishna Bisetty, “**Electrophoretic Analysis of Neotame Diastereomers using  $\beta$ -cyclodextrin as a Chiral Selector**”, *Analytical Technologies Europe: Symposium on the Practical Applications including CE, LC and MS in the Biopharmaceutical Industry (AT Europe 2015)* held at The Westin Grand Berlin from 17-20 March 2015, Berlin Germany.
24. **Suvaradhan Kanchi**, “**Applications and education of green analytical chemistry**” presented in *International Summit on Past and Present Research Systems of Green Chemistry*, held at Hilton Philadelphia Airport from 25-27 August 2014, USA.
25. K. Bisetty, A. Bathinapatla, **S. Kanchi**, P. Singh, M.I. Sabela, “**Construction of chymotrypsin and L-amino acid oxidase dual enzyme based biosensor for the detection of neotame**”, presented in *International Conference on Smart Materials and Surfaces* held at Sheraton Grande Sukhumvit Hotel from 26-28 August 2014, Bangkok, Thailand.
26. **S. Kanchi**, A. Bathinapatla, M. I. Sabela, K. Bisetty, “**Nanocomposite Electrochemical sensor for the Detection of Neotame: A Density Functional Theory Approach for Biological Applications**”, presented in *24<sup>th</sup> Anniversary World Congress on Biosensors* held at Melbourne Convention Centre from 27-30 May 2014, Melbourne, Australia.
27. Quang Phu Tran, **S. Kanchi**, K. Gopala Krishnan, An-Ya Lo, Chaun-Ming Tseng, Shi-Kun Chen, Chiu-Yue Lin, Tsung-Shune Chin, “**A Win-win Strategy on Waste-treatment and Preparation Gold of Nanoparticle**”, presented in *The 15<sup>th</sup> International Symposium on Eco-materials Processing and Design (ISEPD-2014)*, held at Hanoi University of Science and Technology from 12-15 January 2014, Hanoi, Vietnam.
28. A. Bathinapatla, **S. Kanchi**, P. Singh, M. I. Sabela, K. Bisetty, “**Analytical evaluation of steviol glycosides in food samples by capillary electrophoresis supported with molecular docking studies**”, presented in *41<sup>st</sup> SACI (South African Chemical Institute) National Convention-Chemistry for Africa: New Perspectives in the 21<sup>st</sup> Century*, held at Walter Sisulu University from 1-6 December 2013, River Park Conference Centre, East London, South Africa.
29. **S. Kanchi**, M. I. Sabela, P. Singh, A. Bathinapatla, K. Bisetty, “**Multivariate optimization and catalytic differential pulse polarographic determination of Cr (VI) in waste water samples**”, presented in *First International Conference on Composites, Biocomposites and Nanocomposite (ICCBN-2013)*, held at Department of Mechanical Engineering, Durban University of Technology from 2-4 December 2013, Durban, South Africa.
30. T Mpanza, M.I. Sabela, S.S. Mathenjwa, **S. Kanchi**, K. Bisetty, “**Gold nanoparticles decorated carbon nanotubes on glassy carbon electrodes: Capsaicin as test case**”, presented in *41<sup>st</sup> National Convention of the South African Chemical Institute (SACI)*, held at River Park Convention Centre from 1- 6 of December 2013, East London, Eastern Cape, South Africa.
31. A. Bathinapatla, **S. Kanchi**, P. Singh, M. I. Sabela, K. Bisetty, “**Method development for chiral separation of neotame by EKC-CE supported with molecular docking studies**”, presented in *South African Chemical Institute (SACI)*, held at Department of Chemistry, University of Kwazulu-Natal, Westville on 26 September 2013, Durban, South Africa.
32. **Kanchi S.**, Gopala Krishnan K, Chyi-How Lay, Ponnusamy Vinoth Kumar, Tsu Chi Tsai, Shi-Kun Chen, Chiu-Yue Lin, Tsung-Shune Chin, “**Dye adsorption of the activated carbon prepared from biohydrogen fermented waste**”, presented in *11<sup>th</sup> International Conference on Clean Energy (ICCE-2011)*, held at Department of Environmental Engineering and Science, Feng Chia University from 2-5 November 2011, Taichung, Taiwan(ROC).
33. P. Ravi, **S. Kanchi**, P. Anuradha, “**Capillary electrophoretic identification of selenium and cobalt**”, presented in *2<sup>nd</sup> International Annual Biotechnology Conference (ABC-2010)*, held at Department of Biotechnology, International Institute of Information Technology (IIIT) on from 13 - 14 November 2010, Pune, India.

## Seminars

1. Participated in *Good Electrochemistry Practice (GEP) Customer Seminar-KwaZulu Natal 2019*, organized by MICROSEP and METTLER TOLEDO held at Greyville Race Course on 21 February 2019, Durban, South Africa.
2. **S. Kanchi**, P. Krishnamurthy, K. Saraswathi N. Venkatasubba Naidu, “**Ni(II)-ammonium morpholine dithiocarbamate complex studies with polarography at DME by catalytic hydrogen currents in various environmental samples**”, *National Seminar on The Role of Chemistry in Monitoring the Environment (NSCME-2011)*, held at Department of Chemistry, Sri Venkateswara University on 31 October 2011, Tirupati, India.
3. **S. Kanchi**, T. Niranjan, K. Saraswathi, N.Venkatasubba Naidu, “**Determination of copper(II) in water, vegetables and alloy samples with polarography at DME using piperidine dithiocarbamate by catalytic hydrogen currents**” presented in *National Seminar on Current Trends & Developments in Organic Synthesis (CTDOS)*, held at Department of Chemistry, Sri Venkateswara College of Art's and Science on 09 December 2011, Tirupati, India.
4. **S. Kanchi**, Niranjan T, K. Babu Naidu, Naidu Venkatasubba N, “**Monitoring the Status of Anionic Surfactants in Various Water Systems in Urban and Rural Areas of Tirupati, Andhra Pradesh, South India**”, presented in *National Seminar on Recent Research Trends in Synthetic Organic and Natural Products Chemistry*, held at Department of Chemistry, Sri Venkateswara University on 29- 30 March 2010, Tirupati, India.
5. Participated in *National Seminar on Vedic Science in Relevance to Modern Science*, held at Department of Chemistry, Sri Venkateswara University on 18 September 2010, Tirupati, India.
6. **S. Kanchi**, K. Saraswathi, N. Venkatasubba Naidu, “**The determination of cobalt(II) at DME using catalytic hydrogen current technique in various water samples, agricultural materials and pharmaceuticals**”, presented in *National Seminar on Role of Chemistry in Monitoring and Management of Environment*, held at Department of Chemistry, Sri Venkateswara University from 16-17 February, 2009, Tirupati, India.
7. **S. Kanchi**, K. Saraswathi, N. Venkatasubba Naidu, “**Voltammetric Method for Manganese Analysis in Indian Traditional Leafy Vegetables and Medicinal Plants Collected Around Tirupati Town, a Famous Pilgrim Center in**

**India: The Catalytic Hydrogen Wave (CHW) Technique**", presented in *National Seminar on Recent Advances in Chemical Research*, held at Department of Chemistry, Osmania University from 6-7 February 2009, Hyderabad, India.

8. **S. Kanchi**, M. Sulochana, K. Babu Naidu, K. Saraswathi, Nuttala Venkatasubba Naidu, "**Dithiocarbamates as a Sensitive Electroanalytical Reagent: Determination of Chromium by Catalytic Hydrogen Wave at DME in Water Systems and Vegetables**", presented in *National Seminar on Environmental Pollution with Special Reference to Water Pollution*, held at Department of Chemistry, Sir C.R. Reddy Autonomous College on 12 December 2008, Eluru, A.P., India.

#### Workshops

1. Participated in a "Springer Nature Materials-Nanotechnology Workshop" held at Department of Chemistry, University of KwazuluNatal (Westville) on 18 May 2018, Durban, South Africa.
2. "AMBER Workshop", held at University of KwazuluNatal (Westville) from 25-28 January 2016, Durban, South Africa.
3. Participated in a workshop on *Advances in Organic Spectroscopy*, held at Department of Chemistry, P.V.K.N. Govt. College on 8 March 2009, Chittoor, India.

#### Instrumentation Training

1. Attended a training on the (i) Theory of Field Flow Fraction (FFF) and Light Scattering Applications and Method Development (ii) Practical Training in the Laboratories of the European Application Centre (EAC) in Landsberg, Germany (iii) FFF-LS Measurements and Method Development on Customer Samples and Data Evaluation (iv) Service, Maintenance and Trouble Shooting in FFF-LS from 15-18 October 2019 at Department of Chemistry, Durban University of Technology, Durban, South Africa by Evelin Moldenhauer, Postnova Analytics, Germany.
2. Attended training on the (i) Theory of ICP-MS and Method Development (ii) Practical Training in the Sample Preparation (iii) Single Particle Analysis for Nanoparticles from 22 July - 08 August 2019 at Department of Chemistry, Durban University of Technology, Durban, South Africa by Achim Schmottlach, SERS Expert, Germany.



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<b>Father Occupation</b>	<b>:-</b> Assistant Sub-Inspector(Retd)
<b>Mother Name</b>	<b>:-</b> Devasena Kanchi
<b>Mother Occupation</b>	<b>:-</b> Home Maker
<b>Spouse Name</b>	<b>:-</b> Dr Lavanya Madhura, MBA, PhD (Quality Management)
<b>Spouse Occupation</b>	<b>:-</b> Management Information System Executive, Special Project, Omega Healthcare Private Limited, Bengaluru, India.



#### REFERENCES

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