

CURRICULUM VITAE

Dr. VIDYASAGAR. C. C M.Sc., Ph.D.

Assistant Professor

Dept. of PG Studies and Research in Chemistry

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Date of Birth: 11/04/86, Nationality: Indian

Web link: <http://rcub.ac.in/schools/school-of-science/2013-05-01-15-42-05>



PROFESSIONAL EXPERIENCES

- Assistant Professor (3rd Sept 2013 to till date), Dept. of Chemistry, Rani Channamma University, Belgaum
- Post-Doctoral Fellow, University of Nuevo Leon, Govt. of Mexico
- Research Associate at Indian Institute of Science (IISc), Bangalore
- Ph.D in Chemistry (Material Science) at Kuvempu University, Karnataka
- M.Sc in Industrial Chemistry at Kuvempu University, Karnataka
- B.Sc (PCM) Govt. Science College, Chitradurga, Karnataka

AWARDS AND HONOURS

- DST (SERB) Grant Award Letter for conducting national conference (2020), **Govt. of India.**
- Post-Doc Fellowship (Fellowship No.: CONACYT-24641/2017), National Council for Science & Technology, University of Nuevo Leon, **Govt. of Mexico.**
- Appreciation certificate for reviewing 20 articles 2017-18, ELSVIER Team, **Netherlands**
- ITS-DST (SERB) Award, Department of Science and Technology (2016), **Govt. of India** to visit **Sweden.**
- Young Scientist Award, Vision Group of Science and Technology (2015), **Govt. of Karnataka.**
- Best presentation award, Karnataka Science and Technology Academy, Dept. of IT, BT and S&T (2018), **Govt. of Karnataka.**
- Young Faculty Award, Venus International Foundation (VIFFA-15), **Chennai, India** (ISO: 9001:2008 Certified)
- Appreciation certificate from Vice-Chancellor, Rani Channamma University (2014), Belgaum.
- Research Associate (DST01155), DST, SSCU, Indian Institute of Science, **(IISc), Bangalore**
- Rajiv Gandhi National Fellowship (**JRF 2009 and SRF 2011**) from UGC, New Delhi, No. F. 14-2(ST)/2009 (SA-III)
- Best Material Science (Powder technology) Research Article 2012 (5th rank) by Science Scopus (**Elsevier Team, Netherland**) “ZnO semiconducting Nanoparticles”
- Financial services front page news “Industry News by NEWS EDGE magazine” Ametek.Inc, North American global manufacture of electro chemical devises) 01-01-2012, 02:43:27pm- **Energy weekly news, U.S.A.**
- Best Material Science (Powder technology) Research Article 2012 (18th rank) by Science Scopus (**Elsevier Team, Netherland**) “Electrochemical synthesis of ZnO Nanoflowers”
- **Junior Under Officer**, Rank in NCC (2003-06, Govt. Science College, Chitradurga

RESEARCH INTERESTS

- Synthesis and Characterization of Perovskites and Semiconducting nanomaterials for Energy Devices (Photovoltaic cells and Dye-sensitized solar cells).
- Reduced Graphene Oxide/ Metal Oxide composites for Energy and Environmental remediation.

OVER-VIEW OF RESEARCH

Int. Journals: 32 Citations: 464 h-index: 12 Patents: 02

RESEARCH PUBLICATIONS

Sr.No	Authors	Title	Journal Name	IF Scopus
1.	Mabiel Román, Vidyasagar C C , Blanca M, Víctor M. Jiménez-Pérez	Recent advances on synthesis and applications of lead- and tin-free perovskites	J. Alloys. Comp. 835, 155112 (2020) Elsevier (UK)	4.32
2.	Parashuram, Jalaja Udoshi, C. C. Vidyasagar	An improved method for automatic characterization of aluminum oxide nanopore FESEM images	J. Critical. Rev. 7, 5129-5140 (2020) ISSN: 2394-5125	Peer Rev.
3.	Vidyasagar. C. C Prakash, Gururaj, Priya, Keerti	Effect of copper oxide on structural, optical and photocatalytic activity reduced graphene oxide for Eosin B	Asian J. Mater. Chem. 04, 01-10 (2019) (IN)	Peer Rev.
4.	Vidyasagar. C. C Prakash, Gururaj,	Optical and electrical properties of Cu-ZnO prism shaped nanocrystals by microwave combustion method	American J. Energy Res. 07, 31-40 (2019) (USA)	Peer Rev.
5.	Vidyasagar C C* Blanca M. Muñoz Víctor M. Jiménez	Recent advances in synthesis and properties of hybrid halide perovskites photovoltaics	Nano. Micro. Lett. 10, 68-90 (2018) Springer (UK)	7.38
6.	Jessica. Reyes Vidyasagar C C Blanca M. Muñoz Víctor M. Jiménez	Recent advances in fluorescent bioimaging (FBI) of luminescent materials from main group elements: Synthesis, photophysical properties, and their applications	J. Luminescence 195, 290-313 (2018) Elsevier (UK)	2.73
7.	Vidyasagar C C* Gururaj Hosamani Prakash et.al	One-pot Microwave Synthesis and Effect of Cu ²⁺ ions on Structural Properties of Cu-ZnO Nano Crystals	Mater. Today Proc. 5 22171-22180 (2018) Elsevier (UK)	1.09
8.	Vidyasagar C. C* Blanca M. Muñoz Víctor M. Jiménez Gurubasavaraj. P.M	Recent advances in Schiff based Boran derivatives for Light Emitting Diodes (LEDs)	Mater. Today Chem. 11, 133-155 (2018) Elsevier (UK)	3.72
9.	Manjunath. P Vidyasagar. C. C* Arthoba Nayaka,	Development of multi-walled carbon nanotubes modified pencil graphite electrode for the electrochemical investigation of aceclofenac in pharmaceutical and biological samples	Sens. Bio-Sens. Res. 17, 7-17 (2018) Elsevier (UK)	2.7
10.	Parashuram B, Jalaja Udoshi C. C. Vidyasagar	Effect of concentration and temperature on aluminium oxide nanopore by FESEM images	Int. J. Comp Sci. Eng. App. 12, 222- 229 (2018) IEEE	4.30
11.	Parashuram Bannigidadl , Jalaja Udoshi, C.C. Vidyasagar	Effect of Voltage on Aluminium Nanopore Images using Digital Image Processing Techniques	J. Nanosci. Nanoeng. App. 3, 8- 20 (2018) USA	4.51
12.	Vidyasagar. C. C* Mohammed Khenfouch [‡] , Prakash	Green Microwave Combustion Synthesis Cr-ZnO Nanocrystals and Effect of Cr ²⁺ on Structural and Electrical Properties	Adv. Sci. Eng. Med. 9, 810–815 (2017), USA	Peer Revi'd

13. Patil Rajashree, **Vidyasagar, C. C*** Kishore G. Bhat
Synthesis and Characterization of Copper-Caffeine Complex for Anti-Bacterial Studies Using Mic Method
J. Chem. Bio. Phy. Sci. 07, 906-918 (2017)
1.39
14. P. Mannjunath, **C. C. Vidyasagar***, Y. Arthoba Nayaka
Voltammetric studies of Aspirin in Pharmaceutical samples using CTAB-Pencil Graphite Electrode
Org. Med. Chem. 3, 1-5 (2017)
Peer Revi'd
15. R. O. Yathisha, Y. ArthobaNayaka, **C.C. Vidyasagar**
Microwave combustion synthesis of hexagonal prism shaped ZnO nanoparticles and effect of Cr on structural, optical and electrical properties of ZnO nanoparticles
Mater. Chem. Phy. 181,167-175 (2016)
Elsevier (UK)
2.28
16. **C.C. Vidyasagar*** Parashuram Bannigidad H. B. Muralidhara
Influence of Anodizing Time on Porosity of Nanopore Structures Grown on Flexible TLC Aluminium Films and Analysis of Images using MATLAB Software
Adv. Mater. Lett. 07 (1) 71-77 (2016)
Sweden (UK)
1.90
17. S. Archana, K. Yogesh Kumar, Sharon Olivera, B. Muralidhara, **C. C. Vidyasagar**
Development of Multipurpose CuO-GO Nanocomposites for Heavy Metals Adsorption and Super Capacitor Applications
Energy Envir. Focus 5, 1-11, (2016) USA
Peer Revi'd
18. **C. C Vidyasagar**, Y ArthobaNaik*
Surfactant (PEG 400) effect on the crystallinity of ZnO nanoparticles
Arabian. J. Chem. 09, 507-510 (2016)
Elsevier (UK)
4.00
19. **C. C. Vidyasagar*** H. B. Muralidhara Y. Arthobanayaka GururajHosmani
Effect of annealing on structural property, crystallinity and band gap reduction in anatase Cr-TiO₂ semiconducting nanoparticles
Energy. Envi. Focus, 04, 54-63 (2015), USA
Peer Revi'd
20. Yogesh Kumar H. B. Muralidhara **C. C. Vidyasagar** S.Archana
Hierarchically assembled zinc oxide nanorods: An application in Hg(II) adsorption
J. Chem. Bio. Phy. Sci. 1896-1911 (2015)
1.90
21. Parashuram. B **C. C. Vidyasagar**
Effect of Time on Anodized Al₂O₃Nanopores FESEM Images using Digital Image Processing Techniques: A Study on Computational Chemistry
Int. J. Emer. Tren. Tech. Comp. Sci. 4,15-22 (2015)
IEEE
4.41
22. R. Viswanatha, Y. ArthobaNayaka, T.G. Venkatesh, **C.C. Vidyasagar**
Synthesis, characterization and optical properties of Sn-ZnO nanoparticle
Nanosci. Nanotech. Int. J. 3,16-20 (2013) IND
Peer Revi'd
23. Murugaiyasridar, Martin Charlton, **C. C. Vidyasagar**
Etch process development of tantalum pentoxide (Ta₂O₅) using photoresist (S1813)
Nanosci. Nanotech. Int. J. 36-40 (2013)
IND
Peer Revi'd
24. **C. C Vidyasagar**, Y ArthobaNaik* T G Venkatesh, R Viswanath
Optical properties of Dye-sensitized films based on Cu-TiO₂ nanoparticles
Int. J. Nanomater. Biostruct. 2(3) 34-38 (2012) IND
Peer Revi'd
25. **C. C Vidyasagar**, Y ArthobaNaik*, T G Venkatesh, R Viswanath
Optical properties of Dye-sensitized Cd-ZnO nanoparticles
Nanosci. Nanotech. Int. J. 2, 18-23 (2012) IND
Peer Revi'd
26. **C. C Vidyasagar**, H C B Kalachar, Y ArthobaNaik*
Cyclic Voltammetric and FT-IR Studies on Complex Formation between Cloxacillin Sodium with Zn (II) and Pb (II)
Med. Chem. 01, 16-18 (2012)
IND
4.26
27. T G Venkatesh, Y ArthobaNaik R Viswanath, **C.C Vidyasagar**
Electrochemical synthesis and photocatalytic behavior of flower shaped ZnO microstructures
Powder Tech. 225 232-238 (2012)
Elsevier (UK)
3.33
28. R. Viswanatha, T.G. Venkatesh, **C.C. Vidyasagar**, Y. ArthobaNayaka
Preparation and characterization of ZnO and Mg-ZnO nanoparticle
Arch. App. Sci. Res. 4, 480-486 (2012)
USA
Peer Revi'd

29.	R. Viswanatha, Y. Arthoba Nayaka*, T.G. Venkatesh, C.C. Vidyasagar	Structural and optical properties of Mg doped ZnO nanoparticles	J. Chem. Pharm. Res. 4, 1983-1987 (2012) IND	0.32
30.	C. C. Vidyasagar , Y. ArthobaNaik*, T. G.Venkatesha, P. Manjunatha	Sol-Gel synthesis using glacial acetic acid and optical properties of Anatase Cu-TiO ₂ nanoparticles	J. Nanoeng. Nanomanuf. 2, 91-98 (2012) USA	Peer Revi'd
31.	C. C Vidyasagar , Y ArthobaNaik*, T G Venkatesha, R Viswanatha	Solid-State synthesis and effect of temperature on optical properties of CuO nanoparticles	Nano. Micro. Lett. 4 (2) 73-77 (2012) Springer (UK)	7.38
32.	C. C Vidyasagar , Y ArthobaNaik*, T G Venkatesha, R Viswanath	Solid-state synthesis and effect of temperature on optical properties of Cu-ZnO, Cu-CdO and CuO nanoparticles	Powder Tech. 214 337-343 (2011) Elsevier (UK)	3.33

NATIONAL PATENTS

NAME	Type of Patent	Publication File No.	Year
1. Vidyasagar C C	IA-Films: Intelligent Nanoparticles and Anodization Using Spent Diet Coca-Cola Aluminum Films	201941044468 Docket No. 92424 Published	Intellectual Property Rights, Govt. of India 02/11/2019
2. Vidyasagar C C	IMI-AC-Performance: Intelligent Method to Increasing Air Conditioner Performance and Deceasing Maintenance	202011007757 Published	Intellectual Property Rights, Govt. of India 06/03/2020

BOOKS/ BOOK CHAPTERS

Sl. No	Authors	Title	Publisher	Year/ISBN
1.	Vidyasagar C C Arthoba Nayaka	Low-cost synthesis of semiconductors for Dye-sensitized solar cells (BOOK PUBLISHED)	Lambert Academic Publishing, Germany	14/03/2013 (ISBN 978-3-659-36766-3)
2.	Vidyasagar C C* Victor M Jimenez	Book Title: Direct Synthesis of Metal Complexes Chapter 2: Recent Advances in Direct Synthesis of Organometallic and Coordination Compounds	Elsevier (UK), Netherland	ISBN: 978-0-12-811061-4 (April 2018)
3.	Parashuram Bannigidad, Jalaja Udoshi, Vidyasagar C C	BOOK Title: Recent Trends in Image Processing and Pattern Recognition Chapter 2: Effect of Time on Aluminium Oxide FESEM Nanopore Images Using Fuzzy Inference System	volume 1037, pp 397-405 Springer (UK)	ISBN 978-981-13-9181-1 (July 2019)

PROJECTS

Sr. No.	NAME	TITLE	SPONCRED AGENCY	Amount
1.	Vidyasagar C C (Principle Investigator)	Low-cost Semiconducting Counter electrode film for Dye-sensitized Solar Cells	VGST Dept. of IT, BT &ST Govt. of Karnataka, India	4,00,000/- 1 year (2014-15) Completed
2.	Vidyasagar C C (Principle Investigator)	Eco-friendly microwave preparation of Cu-ZnO metal oxides for photovoltaic cells	VGST- Spice Govt. of Karnataka, India	30,000/- 5 months (2014-15) Completed
3.	Vidyasagar C C (Principle Investigator)	Green Synthesis of CuO/ Graphene Oxide Nano composite with Efficient Photocatalytic Degradation of Industrial Textile Waste Water	Rani Channamma University, India	1,00,000/- 1 year (2017-18)
4.	Vidyasagar C C (Dept Level Project)	Advanced Materials for Clean Energy, Health and Environment (Contributed proposal on energy related materials)	DST-FIST Sponsored Department Govt. of India	1,25,00,000/- (2017-18)
5.	Vidyasagar C C (Principle Investigator)	Eco-Friendly Synthesis of Non-Toxic Perovskite Type Materials for Energy Conversion Devices	Rani Channamma University, India	75,000/- (2019-20)

PRESENTATIONS IN THE INT/NAT CONFERENCES

Sl. No.	AUTHORS	TITLE	CONFERENCE/Year	Oral/ Poster
1.	Vidyasagar C C	Enhanced Electrical properties of Cu-ZnO Prism Shaped Nano Crystals for Dye-Sensitized Solar Cells Application	National conference on Science and Technology for Inclusive Development. Karnataka Science and Technology Academy, Dept. of IT, BT and S&T, Govt. of Karnataka	Poster 2018
2.	Vidyasagar C C	Enhanced Structural, Optical and Electrical preoperties of Cu-ZnO nanoparticles	International Conference Japan Society for promotion of Science, Goa	Poster 2017
3.	Vidyasagar C C	Structural, Optical and Electrical preoperties of Cr-ZnO nanoparticles	International Conference on Materials and Technology, University of Delhi, Delhi	Poster 2016
4.	Vidyasagar C C	Impiron dye-sensitized Cr-ZnO films and effect of Cr ions on structural properties	European Advanced Materials Congress, Stockholm, Sweden.	Oral 2016
5.	Vidyasagar C C	Bang-Gap reduction in Cr-TiO ₂	Two days national seminar on Emerging trends Chemistry, KLE's BK college, Chikodi, karnataka	Oral 2015
6.	Vidyasagar C C	Effect of Temperature on Band gap of Anatase Cr-TiO ₂ Nanocrystals	Recent Advances In Chemical Sciences Research, Kuvempu University, Shimoga	Oral 2015
7.	Vidyasagar C C	Optical properties of CuO and Cu-ZnO nanoparticles	International conference on Nanostructured Ceramics and other Nanomaterials, New Delhi	Poster 2014
8.	Vidyasagar C C	Solid-state synthesis ZnO, CdO and CuO nanoparticles	International conference on Renewable energy, Rajasthan University. Jaipur	Poster 2011
9.	Vidyasagar C C	Synthesis of ZnO with and without PEG surfactant	National conferences on Social relevance of chemical sciences, Kuvempu University. Karnataka	Poster 2011
10.	Vidyasagar C C	Synthesis of CuO with and without PEG	National conference on recent trends	Poster

	surfactant	in chemical and biological science, 2011
		kuvempu university. Karnataka
11. Vidyasagar C C	Cyclic Voltammetric and FT-IR Studies on Complex Formation between Cloxacillin Sodium with Cu (II)	Indian council of chemist, Patan, Gujarat Oral 2010

INVITED TALKS/RESOURCE PERSON/LECTURES

Sl. No.	TYPE	TITLE	YEAR	PLACE
1.	Invited Talk	“Nanomaterials & Technology”	22/02 /14	Dept. of Biotechnology, K.L.E’s, RLS Institute, Belgaum
2.	Resource person	Relevance science for national Integration	12/02 /2015	National Service Scheme Rani Channamma University, Belgaum
3.	Interview	All India Radio (AIR), Akashvani Bhadravati (Letter on Behalf of President of India)	2016	Inspiring school students on research activities under Govt. Science Scheme, Bhadravati
4.	Invited Talk	Basics of Nanomaterials and Applications	2017	Dept. of Chemical Science University of Nuevo Leon, Mexico
5.	Resource person	Advanced Nanomaterials for Environmental remedy	16/2/ 2019	Govt. First Grade College, Raibag, Bijapur

Conferences/Workshops/Seminars Organized

1. International webinar on “Advancements in Chemical Sciences towards COVID-19” (ACSC-2-2-), 12th-13th June 2020, Rani Channamma University, Belagavi.
Convener: Dr. Vidyasagar. C. C
2. National Seminar on Current Science (Science day), 28th Feb 2020, Rani Channamma University, Belagavi.
Organizing Secretary: Dr. Vidyasagar. C. C

ACADEMIC PROGRAMMS ATTENDED

- Online refresher course in chemistry for higher education, **SWAYAM, MHRD**, Govt. of India.
- Refresher Course [University & PG College M.Sc. Teachers (CHEMISTRY) training programme] @ TDC, Indian Institute of Science, IISc. (June 7-27, 2018).
- Post-Doc Fellowship (Fellowship No.: CONACYT-24641), National Council of Science & Technology, **Govt. of Mexico**. (Six Months on Steady leave).
- 104th Orientation Programme at UGC-Academic staff college, University of Mysore, 05/04/2014 to 02/07/14.
- Four days Faculty development program on Advanced Materials and Nanotechnology for research, Engineering and Health Care, 04-07/06/2015 Organised by Shaikh College of Engineering & Technology, Belagavi.
- Research Associate, (DST Fellowship 01155, Govt. of India) at Indian Institute of Science (**IISc**), **Bangalore**

ACADEMIC CURRICULUM

- Nodal Officer from RCU (2020), Ramaiah Public Policy Centre, Ramaiah Medical College, Karnataka.
- Waste management committee (2020) member, Rani Channamma University, Belagavi.
- Convener, Electoral Literacy Club (2019), Rani Channamma University, Belagavi.
- State student’s scholarship E-Attestation officer (2019), Rani Channamma University, Belagavi.
- Co-ordinator, Students Monitoring Cell (2018) Dept. of Botany, Rani Channamma University, Belagavi.
- Co-ordinator (2018), RCU Academic Report Publishing committee (2016), RCU, Belagavi.
- Presiding officer, Election Duty 22/03/14, Ref. No. 44033, Belgaum.
- Co-ordinator, Sports and cultural events, Rani Channamma University, Belagavi.

- Documents verification officer, PG CET counseling for MBA and MCA (19-07-14), Govt. of Karnataka.
- Deputy superintendent of exam (Chemistry) 2014-15, Rani Channamma University, Belgaum.
- Presiding officer, Election Duty 29/05/15, Ref. No. 102093, Belgaum.
- Served as Coordinator/ Judge for PG Gymkhana sports and cultural activities for the academic year 2014-15, Rani Channamma University, Belagavi.
- Presiding officer, Election Duty 29/05/16, Ref. No. 8888037, Belgaum.

BOARD MEMBER

- BOS member (2020), Department of Chemistry, Rani Channamma university, Belagavi.
- BOAE (2019), Member, Dept. of Chemistry, Rani Channamma University, Belagavi.
- BOE Member (2018), Dept. of Chemistry, Rani Channamma University, Belagavi.
- BOE Member, Dept. of Chemistry, Karnataka University, Darwad
- BOE Member, Dept. of Chemistry, Mangalore University, Mangalore
- BOE Member, Dept. of Chemistry, Gulbarga University, Kalburgi
- Electrochemical society of India, Life Member Indian Institute of Science, (IISc), Bangalore.
- Society for Materials, Bhabha Atomic Research Center, Mumbai/1229/2008/GBBSD, Mumbai.
- National Advisory Committee, International Conference on Advanced Science and Engineering, Bangkok.
- Science for Social Service (S³), Kuvempu University, Shimoga.

EDITORIAL BOARD MEMBER

- | | |
|--|---------------------------------------|
| • RSC Advance | Royal Chemical Society (RSC), UK |
| • Journal of Environmental Chemical Engineering | Elsevier, UK |
| • Results in Physics | Elsevier, UK |
| • Physics and Materials Chemistry | Science and Education Publishing, USA |
| • American Journal of Materials Engineering and Technology | Science and Education Publishing, USA |
| • Chemical Engineering and Science | Science and Education Publishing, USA |
| • Journal of Materials Physics and Chemistry | Science and Education Publishing, USA |

MENTORS

Post-Doc Research Guide:

Prof. Victor M Jimenez Perez M.Sc., Ph.D
Department of Chemistry
University of Nuevo León,
Monterrey, N. L., **México**
Tel. +52 (81) 83294010,

Post-Doc Research Guide:

Prof. T. N. GURU ROW Ph.D., FNA, FASc, FRSC
Solid-state and Structural Chemistry Unit
Indian Institute of Science (IISc)
Bangalore- 560012, **India**

Dr. Sheela. K. Ramasesha

M.Sc., Ph.D
Visiting Scientist
Divecha center for climate change
Indian Institute of Science (IISc)
Bangalore- 560012, **India**

Ph.D Research Guide:

Prof. Y. ARTHOBA NAYAK M.Sc., Ph.D.(CSIR-JRF)
Dept. of Chemistry, Kuvempu University
Shankaraghatta-577451, **India**
Ph: +91-9448855078