CURRICULUM VITAE

(Last Updated-September 2023)

Dr. Bhaskar R. Sathe (Fulbright Fellow, F-MASc)
Associate Professor, Department of Chemistry,
Coordinator-Forensic Science and Head-Department of Nanotechnology
Dr. Babasaheb Ambedkar Marathwada University Aurangabad 431 004, INDIA
Tel: +91 240 2403311/313; Fax: +91 240 2400291;
Email: bhaskarsathe@gmail.com ; bsathe.chemistry@bamu.ac.in

Objective:

To pursue scientific contributions that would further enrich my experience and creativity in the area of Nanomaterial synthesis and their potential applications

Research Interests:

Nanoscience and nanotechnology, Inorganic materials, Nanomaterials (metal, metal oxide, C_{60}, carbon nanotubes, graphene and their heterostructures), Fuel cell based electrocatalytic reactions, Sensors, Electrochemical water splitting and Bio-mass conversion reactions, Organic and Environmental electrochemistry and other related interfacial studies.

Education:

Post-doctoral (September 2012- September 2013)	: Fulbright-Nehru Postdoctoral Research Fellow at Rutgers, The State University of New Jersey 08854, USA Research supervisor: Prof. Teddy (Tewodros) Asefa Department of Chemistry and Chemical Biology Rutgers, The State University of New Jersey 08854, USA Project Title: ***"Carbon Based Metal Nanostructured Hybrid Electrocatalysts for Water Splitting Reactions"***
Ph.D. (January 2006- August 2011)	: Chemistry; CSIR-National Chemical Laboratory through University of Pune, India Research supervisor: Professor Vijayamohanan K. Pillai, Physical and Materials Chemistry Division, National Chemical Laboratory Pune, India. (Ex-Director, CSIR- National Chemical Laboratory Pune, India and CSIR-Central Electrochemical Research Institute (CECRI), Karaikudi 630006 Tamil Nadu (India). Thesis entitled- **"*Synthesis and Characterization of High Aspect Ratio Rhodium Nanostructures*"**
Research Assistant (June 2004- January 2006)	: Polymer and Advanced Materials & Physical and Materials Chemistry Division, National Chemical Laboratory Pune, India. Research supervisors: Prof. U. Natarajan, Prof. Vijayamohanan K. Pillai and Prof. I. S. Mulla
M.Sc. (June 2001- April 2003)	: Physical Chemistry (First Rank), Dr. BA Marathwada University Aurangabad, India.
B.Sc. **(**June 1998- April 2001)	: Chemistry (Physics and Mathematics as subsidiaries), First Division, Dr. BA Marathwada University Aurangabad, India.

Employment and Professional Experience:

May 2022 onwards	: Head, Department of Nanotechnology (June 2022 onwards)
January 2021	: Coordinator, Department of Forensic Science (June 2021 onwards)
February 2022- date	: Associate Professor, Department of Chemistry, Dr. BA Marathwada University Aurangabad, India.
October 2008-date	: Assistant Professor, Department of Chemistry, Dr. BA Marathwada University Aurangabad, India.
March 2010- date	: Manager of "Indian Research Scholar's Association for Promoting Science (IRSAPS)", India established in 2010.

Panel Reviews/Judge/ Professional Activities:

Ad Hoc Manuscript Reviewer for:	:ACS Sustainable Chemistry and Engineering, Journal of Physical Chemistry, Catalysis Today, New Journal of Chemistry, ACS Omega, ACS Applied Energy Materials, ACS Applied Nano Materials, International Journal of Hydrogen Energy, Chemical Communication, RSC Advances, Scientific Report, Electrochemical Communications, Physical Chemistry and Chemical Physics, Journal of Materials Chemistry A, B & C, Nanoscale, Electrochemical Acta, Chem. Cat Chem, Applied Surface Science, Journal of Materials Science: Materials in Electronics, Current Analytical Chemistry, Chem Phys Chem, Ionics, Electroanalytical Chemistry, Applied Energy and others+
External examiner for PhD thesis:	CSIR-National Chemical Laboratory, Pune (India) Rashtrasant Tukadoji Maharaj Nagpur University (India) Savitribai Phule Pune University, Pune (India) Shivaji University Kolhapur (India) Punyashlok Ahilyadevi Holkar Solapur University, Solapur (India) Institute of Chemical Technology (ICT) Mumbai Centre for Materials for Electronics Technology (C-MET) Pune (India)
Editorial Board Member	: Journal of Nanoscience and Nanotechnology (national) (January 2012).
Advisory Board Member	: International Journal of Chemical Research (international) (March 2012).
Research Guide	: a) Department of Chemistry & b) Department of Nano-technology/Multidisciplinary Guideship, Dr. BA. Marathwada University, Aurangabad: **10 research students registered** for their Ph.D. degree and **05 are awarded.**
Ad Hoc BOS Member:	Department of Forensic Science (Dr. BA Marathwada University Aurangabad), Department of Nanotechnology (Dr. BA Marathwada University Aurangabad), Department of Chemistry (Rajarshi Shahu College, Latur) Department of Chemistry (MGM University Aurangabad)

Awards, Recognitions and Fellowships:

- **World top 2% scientific rank** updated by Stanford University USA based on Scopus-Elsevier data for a year 2023.
- **World top 2% scientific rank** updated by Stanford University USA based on Scopus-Elsevier data for a year 2022.
- **AD Scientific ranking for scientists** from university (03), country (5417), world (250562) based on Google Scholar data for a year of 2023.
- **World top 2% scientific rank** updated by Stanford University USA based on Scopus-Elsevier data for a year 2021.
- **AD Scientific ranking for scientists** from university (04), country (6615), world (276873) based on Google Scholar data for a year of 2021 and 2022.
- Elected as a **Fellow of Maharashtra Academy of Sciences (MASc)** for your significant contributions to **Chemical Sciences 2021.**
- Elected as a **Young Associate of Maharashtra Academy of Sciences (MASc)** for your significant contributions to **Chemical Sciences 2017.**
- **Department of Atomic Energy, Young Scientist Research Award** (17 Lakh), awarded start up grant from Board of Research in Nuclear Sciences (BRNS) Mumbai, Government of India (January 2015).
- **Visiting Faculty at Rutgers**, The State University of New Jersey, (USA) (2012-13).
- Awarded **Fulbright-Nehru** Postdoctoral Research Fellowships at Rutgers, The State University of New Jersey (USA) through United States-India Educational Foundation (USIEF) scheme 2012-2013.
- Awarded University **"Shikshak Pratibha"** Purskar (2013) given by Department of Mass communication and Journalism, Dr. BA Marathwada University, Aurangabad.
- Fast Track scheme for **Young Scientist**, 23 Lakh awarded startup grant from science and engineering research board (SERB), from department of science and technology (DST), Government of India. (August 2012).
- **Senior Research Fellowship** (SRF) awarded by Council of Scientific and Industrial Research (CSIR) Govt. of India. (January 2007).
- Awarded for **Junior Research Fellowship** (JRF) through the CSIR-UGC-JRF/LS examination conducted jointly by Council of Scientific and Industrial Research (CSIR) and University Grants Commission (UGC), Govt. of India. (June 2005), one among the top 20% of the students qualified in (CSIR-JRF).
- **First rank** in M.Sc. Physical Chemistry at Department of Chemistry, Dr. BA Marathwada University, Aurangabad, India (June 2003).
- Maharashtra State (India) **"Eklavya Merit Scholarship"** award at Department of Chemistry, Dr. BA Marathwada University, Aurangabad, India (June 2001-June 2003).
- Reviewer of **Fulbright-Junior Advanced Research Award-2017-18** of Polish-US Fulbright Commission, Poland (EU); Reviewer for **Research Grant Proposals of Foundation of Polish Science Poland (EU)**; Reviewer for **Extra Mural Research Grant Funding of DST-SERB** from Chemical and Physical Sciences, Gov. of India.

Professional Membership:

1. Life active member of **Indian Society for Electroanalytical Chemistry (ISEAC) of India (LM 206) and Executive Committee Member.**
2. Life active member of **Materials Research Society of India (MRSI) (LMB 2510)**.
3. Life active member of **Electron Microscope Society of India (LM-1182).**
4. Life active member of **Electrochemical Society of India (LM-314).**
5. Life Membership of **American Chemical Society (ACS) (30888179).**
6. Life active member **of Society of Materials Chemistry (SMC).**

Editorial Roles:

1. **Associate Editor:** For Electrochemistry Frontiers of Chemistry since 2022.
2. **Review Editor:** For Electrochemistry Frontiers of Chemistry since 2015.
3. **Guest Associate Editor:** For Smart Materials Frontiers of Materials on topic, "Smart Materials for Energy
4. Conversion and Sensor Based Technologies" (2019-2020).
5. **Guest Associate Editor:** For Smart Materials Frontiers of Materials on topic, "Smart Materials for Energy Conversion and Sensor Based Technologies" (2019-2020).
6. **Guest Associate Editor:** Frontiers of Chemistry on topic, "Carbon Nanostructure Based Electrocatalysis for Energy and Environmental Remediation" (2021-2022).
7.

Projects handled:

1. Worked in the Prof. U. Natarajan's group at Polymer Science and Engineering Department, National Chemical Laboratory, Pune on industrial sponsored project focusing on synthesis of nanocomposites fillers for paints (2004-2005).
2. A. Worked in Prof. Vijayamohanan K. Pillai's group at Physical and Materials Chemistry Division, National Chemical Laboratory, Pune entitled "Preparation of Electrochemical Sensors for CO and SO_2 Detection", funded by Department of Science and Technology (DST) New Delhi, in collaboration with United Phosphorus Limited, Vapi, Gujrat, India.

   B. Also worked in the same group on, "Synthesis and Characterization of Metal and Metal Oxide Nanowires and their Composites" funded by Honeywell, USA (2005-2006).

Research Project Findings from National Agencies:

Ongoing Research Projects (1.3 Cr):

Sr. No.	Title	Funding Agency/Duration	Amount in INR (Lakh)	PI/CO-PI
1.	Chemically sustainable metal nanoparticles functionalized CZTS (Cu_2ZnSnS_4) based nanostructures for efficient photoelectrocatalytic water splitting	Council of scientific & industrial research human resource development group (CSIR-HRDG) New Delhi **(2021-2024)**	**54.300**	Principal Investigator
2.	Socio-scientific Approach to Conservation of Bidri Art, With special reference to Soil Analysis	Ministry of Science and Technology, Government of India, Department of Science and Technology, New Delhi, Program: **Science and Heritage Research Initiative (SHRI) (08-2019 to 07-2022)**	**81.0102**	Group Project (Inter department)

Research Projects (Completed 2008-2022):

Sr. No.	Title	Funding Agency/Duration	Amount in INR (Lakh)	PI/CO-PI
3.	Electrochemically sustainable metal nanoparticles functionalized carbon nanoelectrodes for electrocatalytic CO_2 hydrogenation reactions	Science and engineering research board (SERB), Department of Science and Technology (DST) New Delhi (2017-2020)	**42.196**	Principal Investigator
4.	Earth abundant nanostructured metal-carbon heterostructures for electrocatalytic H_2 generation reactions	Board of research In nuclear sciences (BRNS), Govt of India, Department of atomic energy (DAE), BARC, Mumbai (2015-2018)	**17.000**	Principal Investigator
5.	Fabrication of carbon based metal nanostructural hybrid materials for electrochemical gas sensor application	Science and engineering research board (SERB), Department of Science and Technology (DST) New Delhi (2013-2016)	**22.880**	Principal Investigator
6.	Surface Modification of Carbon Nanotube based Electrocatalysts for Nitrate Reduction	Dr. Babasaheb Ambedkar Marathwada University Aurangabad (2019-2021)	**3.000**	Principal Investigator
7.	Organic synthesis and nanomaterials for catalysis, under the scheme "UGC-SAP DRS-I phase"	University Grant Commission, New Delhi (2010-2015)	**45.000**	Group Project (Intra Department) Infrastructural Funding
8.	Synthesis of bioactive molecules for drug design and nanomaterials for catalysis, under the scheme, "UGC-SAP DRS-II phase" (Group Project)	University Grant Commission, New Delhi (2015-2020)	**140.000**	Group Project (Intra Department) Infrastructural Funding
9.	Organic synthesis and nanomaterials, under the DST-FIST (First Level) (Group Project)	Department of Science and Technology (DST), New Delhi (2015-2020)	**100.000**	Group Project (Intra Department) Infrastructural Funding

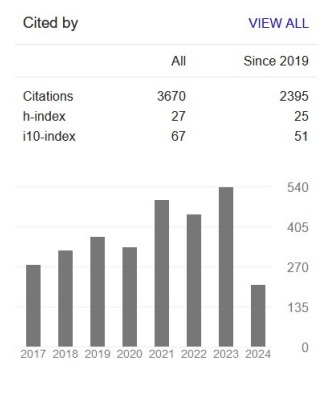
Research Work, Patents and Publications in Referred Journals:

Dr. Bhaskar R. Sathe Fulbright Fellow, FMASc

FOLLOWING

Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University Aurangabad
Verified email at bamu.ac.in - Homepage
Functional Hybrid Nanomat… Electrochemistry Energy Resources

TITLE	CITED BY	YEAR
Cobalt-embedded nitrogen-rich carbon nanotubes efficiently catalyze hydrogen evolution reaction at all pH values X Zou, X Huang, A Goswami, R Silva, BR Sathe, E Mikmeková, T Asefa Angewandte Chemie 126 (17), 4461-4465	1238	2014
Metal-free B-doped graphene with efficient electrocatalytic activity for hydrogen evolution reaction BR Sathe, X Zou, T Asefa Catalysis Science & Technology 4 (7), 2023-2030	302	2014



Patents:

Sr. No.	Title of Invention	Application Number
1.	A Formulation to Create Commensurate Patina On Bidriware Handicraft Alloy	202221056586 Dated 02 Oct 2022
2.	Formulation To Create Patina at Tropical Ambient Temperature, On Zn-Cu Alloy In E+N Phase Field.	202321025626 dated 03 April 2023

Average Impact Factor of Best 05 publication~20.075; 10 Publications~13.14 and 06 publications are single author) (as of June 2023), Average per Paper Impact Factor is 5.275

Google Scholar : https://scholar.google.co.in/citations?user=tBq4eOkAAAAJ&hl=en

Loop Link: https://loop.frontiersin.org/people/566411/network

Orchid iD: https://orcid.org/0000-0001-8989-0967

List of Best 10 Publications (2007 to Till Now)

Sr. No.	Title of the Publication	Name of Journal	Impact Factor
1.	"Highly efficient manganese oxide decorated graphitic carbon nitrite electrocatalyst for reduction of CO_2 to formate" Balaji B. Mulik, Ajay V. Munde, Balasaheb D. Bankar, Ankush V. Biradar, **Bhaskar R. Sathe**	*Catalysis Today, **2021, 370, 104-113***	**6.562**
2.	"Enhanced electrocatalytic activity towards urea oxidation on Ni nanoparticle decorated graphene oxide nanocomposite" Ajay V. Munde, Balaji B. Mulik, Parag P. Chavan, **Bhaskar R. Sathe**	*Electrochimica Acta, **2020**, 349 art. no. 136386*	**7.336**
3.	"L-Lysine-Functionalized Reduced Graphene Oxide as a Highly Efficient Electrocatalyst for Enhanced Oxygen Evolution Reaction" Vijay S. Sapner, Parag P. Chavan, **Bhaskar R. Sathe**	*ACS Sustainable Chemistry and Engineering, **2020,** 8(14), 5524-5533*	**9.224**
4.	"Ni/NiO@rGO as an Efficient Bifunctional Electrocatalyst for Enhanced Overall Water Splitting Reaction", Shankar S. Narwade, Shivsharan M. Mali, Renuka V. Digraskar, Vijay S. Sapner, **Bhaskar R. Sathe**	*Int. J. Hydro. Energy **2019**, 44 (49), 27001-27009*	**7.139**
5.	"Enhanced hydrogen evolution reactions on nanostructured Cu_2ZnSnS_4 (CZTS) electrocatalyst," Renuka V Digraskar, Balaji B Mulik, Pravin S Walke, Anil V Ghule, and **Bhaskar R. Sathe**	*Appl. Surf. Sci. **2017,** 412,* 475-481.	**7.392**
6.	"Cobalt-embedded nitrogen-rich carbon nanotubes efficiently catalyze H_2 evolution reaction at all pH Values", Xiaoxin Zou, Juan Su, Rafael Silva, Anandarup Goswami, **Bhaskar R. Sathe** and Tewodros Asefa	*Angew. Chem. Int. Ed.* **2014**, *126,* 4416.	**16.823**
7.	"Metal-free B-doped graphene with efficient electrocatalytic activity for H_2 evolution reaction", **Bhaskar R. Sathe**, Xiaoxin Zou and Tewodros Asefa	*Catal. Sci. Technol.* **2014**, *4,* 2023.	**6.177**
8.	"Enhanced electrocatalytic performance of interconnected Rh nano-chains towards formic acid oxidation" **Bhaskar R. Sathe**, Beena K. Balan and Vijayamohanan K. Pillai	*Energy Environ. Sci.* **2011,** *4,* 1029.	**39.714**
9.	"Synthesis of Rh-carbon nanotube based heterostructures and their enhanced field emission characteristics" **Bhaskar R. Sathe,** Bhalchandra A. Kakade, Ajay Kushwaha, Mohammed Aslam and Vijayamohanan K. Pillai	*Chem. Commun.* **2010,** *46,* 5671. ***[Selected as a hot article]***	**6.065**
10.	"Quantized double layer charging behavior of $Rh_{2057}(TDA)_{321}$ clusters using differential pulse and cyclic voltammetry", Bhalchandra A. Kakade, Shashidhar Shintri, **Bhaskar R. Sathe**, S. B. Halligudi, and Vijayamohanan K. Pillai	*Adv. Mater.* **2007,** *19,* 272.	**32.086**
		Total Impact Factor	**131.446**
		Average Impact Factor for Top 10 Articles	**13.14**

List of Publications (2007 to Till Now)

Sr. No.	Title of the Publication	Name of Journal	Impact Factor
1.	Multiwalled carbon nanotubes decorated with molybdenum sulphide (MoS2@ MWCNTs) for highly selective electrochemical picric acid (PA) determination, Raviraj P Dighole, Ajay V Munde, Balaji B Mulik, Somnath C Dhawale, **Bhaskar R Sathe**	***Applied Surface Science, 2024***	**7.392**
2.	New Insight into N, S-Doped Carbon Nanosheets Embedded with Ni/NiO Nanocluster Electrocatalysts Derived from Conjugated Polymers for the Oxidation of 2-Propanol to Acetone, Pratiksha D Tanwade, Arindam Adhikari, **Bhaskar R Sathe**	***J. Phys. Chem. C 2024***	**3.7**
3.	Ternary Composite WS_2/GO/Au Synthesized from Laser Ablation and Hydrothermal Method for Photo- and Electro-chemical Degradation of Methylene Blue Dye, Vinayak Shinde, Pratiksha Tanwade, Tetsuro Katayama, Akihiro Furube, **Bhaskar Sathe,** Pankaj Koinkar	***Surfaces and Interfaces 2024***	**6.137**
4.	Polyaniline based Highly Selective Electrochemical Sensor for Ascorbic Acid Determination: Performance Studies towards Real Sample Analysis, Rohini A Kale, Somnath C Dhawale, Balaji B Mulik, Arindam Adhikari, **Bhaskar R Sathe**	*Journal of Industrial and Engineering Chemistry 2024*	**5.278**
5.	ZnO-PANI nanocomposite: Enhanced electrochemical performance towards energy storage, Dipak A. Tonpe, Ketan P. Gattu, Vishnu V. Kutwade, Sung-Hwan Han, **Bhaskar R. Sathe,** Ramphal Sharma	*Journal of Energy Storage 81 (2024) 110434*	**9.4**
6.	CTAB-Assisted Synthesis of FeNi Alloy Nanoparticles: An Effective and Stable Electrocatalyst for Urea Oxidation Reactions, Somnath Dhawale, Ajay Munde, Balaji Mulik, Raviraj Dighole, Sanjio Zade, **Bhaskar Sathe,**	*Langmuir 2023*	**3.9**
7.	Surface Patina And Clay Characterization: Multi-Analytical Investigations into Bidri Handicraft, Krishna Priya Rolla, Abhijeet Shelke, **Bhaskar R. Sathe**, Arbaj Khan, Vijay Sapner, Balaji Mulik	*International Journal of Conservation Science 2023*	**1.0**
8.	Economic and binder-free synthesis of $NiCo_2O_4$ nanosheets on a Flexible stainless-steel mesh as a bifunctional electrode for water splitting, Pooja K. Bhoj, Gokul P. Kamble, Jyotiprakash B. Yadav, Tukaram D. Dongale, **Bhaskar R. Sathe,** Anil V. Ghule; **https://doi.org/10.1016/j.apsusc.2023.159083**	*Applied Surface Science, 2024*	**7.392**
9.	NiO-Nanoparticle-Embedded Polyaniline for Enhanced Ammonia and Water Oxidation Reactions, Pratiksha D. Tanwade, Ajay V. Munde, Balaji B. Mulik, Arindam Adhikari, Rajkumar Patel, and **Bhaskar R. Sathe; https://doi.org/10.1021/acs.energyfuels.3c03536**	*Energy and Fuels, 2023*	**5.30**
10.	Fabrication of MoO_3/RGO/Au Composite for Increased Photocatalytic Degradation of Methylene Blue, Akash Sawate, Niloy Paul, Somnath Dhavale, **Bhaskar R. Sathe,** Tetsuro Katayama, Akihiro Furube, Panakaj Koinkar	*International Journal of Modern Physics B 2023*	**1.70**
11.	Enhanced Electrocatalytic Hydrazine Oxidation on MoS_2-GO Nanosheets; Pratiksha D. Tanwade, Balaji B. Mulik, **Bhaskar R. Sathe,** B. B. Musmade, Vinayak Shinde, Akihiro Furube, Panakaj Koinkar	*International Journal of Modern Physics B 2023*	**1.70**
12.	Sonochemically Prepared Bismuth doped Titanium Oxide-Reduced Graphene Oxide (Bi@TiO_2-rGO) Nanocomposite for Effective Visible Light Photocatalytic Degradation of Malachite Green, Gauri Kallawar, Bharat A. Bhanvase, and **Bhaskar R. Sathe**	*Diamond and Related Materials 2023*	**4.10**
13.	Cobalt/Cobalt Oxide Nanorods-Decorated Reduced Graphene Oxide (Co/Co3O4-rGO) for Enhanced Electrooxidation of Glycerol,Vijay S. Sapner, Pratiksha D. Tanwade, Ajay V. Munde, and **Bhaskar R. Sathe, https://doi.org/10.1021/acsanm.3c02636**	*ACS Applied Nanomaterials 2023*	**5.90**
14.	Nanostructured Ce/CeO_2-rGO: Highly Sensitive and Selective Electrochemical Hydrogen Sulfide (H_2S) Sensor, Shivsharan M. Mali, Shankar S. Narwade, Balaji B. Mulik, Vijay S. Sapner, Shubham J. Annadate, **Bhaskar R. Sathe; https://doi.org/10.1007/s12678-023-00839-6**	*Electrocatalysis, 2023*	**3.1**
15.	Spherical Ni/NiO nanoparticles decorated on nanoporous carbon (NNC) as an active electrode material for urea and water oxidation reactions, Parag P. Chavan, Pratiksha D. Tanwade, Vijay S. Sapner, and **Bhaskar R. Sathe**	*RSC Adv., 2023, 13, 26940–26947*	**4.036**
16.	Enhanced Electrochemical Ethanol Sensitivity on Ni/NiO-rGO Hybrids Nanostructures at Room Temperature, Shivsharan M Mali, Shankar S Narwade, Balaji B Mulik, Renuka V Digraskar, Rajkumar R Harale, **Bhaskar R Sathe**	*Chem Select 2023, 8/12, e202204328*	**2.307**

17.	Highly Dispersed Core–Shell Ni@NiO Nanoparticles Embedded on Carbon–Nitrogen Nanotubes as Efficient Electrocatalysts for Enhancing Urea Oxidation Reaction, Devendra M. Sanke, Ajay V. Munde, Jasmine Bezboruah, Palak T. Bhattad, **Bhaskar R. Sathe,** and Sanjio S. Zade	*Energy Fuels 2023, 37, 6, 4616–4623*	**4.654**
18.	Recent advances in modified commercial separators for lithium–sulfur batteries, Andrew Kim, Seok Hyeon Oh, Arindam Adhikari, **Bhaskar R Sathe**, Sandeep Kumar, Rajkumar Patel	*J. Mater. Chem. A, 2023,11, 7833-7866* ***(Most Popular Article)***	**6.626**
19.	Metal-organic framework derived carbon-based electrocatalysis for hydrogen evolution reactions: A review, H. Gunaseelan, Ajay V. Munde Rajkumar Patel, **Bhaskar R. Sathe**	*Materials Today Sustainability 2023, 22,100371*	**7.244**
20.	Impact of variable pH on the stability and aggregate kinetics of Bidri handicraft surface patina, Balaji B. Mulik, Vijay S. Sapner, Arbaj Khan, Krishna Priya Rolla, Abhijeet Shelke, **Bhaskar R. Sathe**	*Inorganic Chemistry Communications, 148, 2023, 110314*	**3.428**
21.	Interface Engineering of SRu-mC3N4 Heterostructures for Enhanced Electrochemical Hydrazine Oxidation Reactions, Ajay Munde, Priti Sharma, Somnath Dhawale, Ravishankar G Kadam, Subodh Kumar, Hanumant B Kale, Jan Filip, Radek Zboril, **Bhaskar R Sathe,** Manoj B Gawande	*Catalysts 2022, 12(12), 1560*	**4.501**
22.	Facile synthesis of flower-like Bi_2O_3 as an efficient electrode for high performance asymmetric supercapacitor, Seema A Mane, Anil A Kashale, Gokul P Kamble, Sanjay S Kolekar, Suprimkumar D Dhas, Meenal D Patil, Annasaheb V Moholkar, **Bhaskar R Sathe,** Anil V Ghule	*Journal of Alloys and Compounds 926, 2022, 166722*	**6.371**
23.	Stable and highly efficient Co–Bi nanoalloy decorated on reduced graphene oxide (Co–Bi@ rGO) anode for formaldehyde and urea oxidation reactions, Ajay V Munde, Balaji B Mulik, Raviraj P Dighole, **Bhaskar R Sathe**	*Materials Chemistry and Physics 292, 2022, 126843*	**4.778**
24.	Facile, Cost Effective and Eco-friendly Approach to Synthesize Bio-MnO_2 Nanosphered Thin Film for all Solid-State Flexible Asymmetric Supercapacitor, Rutuja Chavan, Gokul Kamble, Anil Kashale, Sanjay Kolekar, **Bhaskar Sathe,** Anil Ghule	*Chemistry Select, https://doi.org/10.1002/slct.202202166*	**2.307**
25.	Facile Synthesis and Characterization of γ-Al_2O_3 Loaded on Reduced Graphene Oxide Hybrids for Electrochemical Reduction of CO_2, Balaji B Mulik, Balasaheb D Bankar, Ajay V Munde, Ankush Biradar, Tewodros Asefa, **Bhaskar R. Sathe**	*Sustainable Energy Fuels, 2022, 10.1039/D2SE00953F*	**6.813**
26.	Melamine functionalised multiwalled carbon nanotubes (M-MWCNTs) as a metal-free electrocatalyst for simultaneous determination of 4-nitrophenol and nitrofurantoin, Raviraj P. Dighole, Ajay V. Munde, Balaji B. Mulik, Sanjio S. Zade, and **Bhaskar R. Sathe**	*New J. Chem., 2022,46, 17272-17281*	**3.925**
27.	Highly efficient metal-free ethylenediamine-functionalized fullerene (EDA@C60) electrocatalytic system for enhanced hydrogen generation from hydrazine hydrate, Shankar S. Narwade, Shivsharan M. Mali, Pratiksha D. Tanwade, Parag P. Chavan, Ajay V. Munde and **Bhaskar R. Sathe**	*New J. Chem., 2022,46, 14004-14009*	**3.925**
28.	Enhanced Hydrazine Oxidation on Histidine Functionalized Graphene based Electrocatalysts, Parag P. Chavan, Vijay S. Sapner, **Bhaskar R. Sathe**	*Energy & Fuels, 2022, 36, 9, 4799–4806*	**4.654**
29.	Design and Synthesis of Rare Lead (II)-Based Electrocatalysts for Oxygen Evolution Reaction, Sadhika Khullar, Janak, Sakshi, Haneesh Saini, Vijay Sapner, **Bhaskar Sathe**, Datta Markad	*Inorg. Chem. 2022, 61, 19, 7579–7589*	**5.436**
30.	Recent Progress on Carbon Quantum Dots Based Photocatalysis, Hwapyung Jung, Vijay S Sapner, Arindam Adhikari, **Bhaskar R Sathe,** Rajkumar Patel	*Front. Chem. 2022; 10: 881495.*	**5.545**
31.	Bi2O3@Bi nanoparticles for ultrasensitive electrochemical determination of thiourea: monitoring towards environmental pollutants, Ajay V. Munde, Balaji B. Mulik, Raviraj P. Dighole, Somnath C. Dhawale, Lila S. Sable, Ashwini T. Avhale**, Bhaskar R. Sathe**	*Electrochimica Acta, 2021, 394, 139111*	**7.336**
32.	Urea Electro-Oxidation Catalyzed by an Efficient and Highly Stable Ni–Bi Bimetallic Nanoparticles, Ajay V. Munde, Balaji B. Mulik, Raviraj P. Dighole, **Bhaskar R. Sathe**	*ACS Appl. Energy Mater. 2021, 4, 11, 13172–13182*	**6.959**
33.	Highly efficient manganese oxide decorated graphitic carbon nitrite	*Catalysis Today, 2021,*	**6.562**

	electrocatalyst for reduction of CO2 to formate, Balaji B. Mulik, Ajay V. Munde, Balasaheb D. Bankar, Ankush V. Biradar, **Bhaskar R. Sathe**	*370, 104-113*	
34.	Electrocatalytic and catalytic CO_2 hydrogenation on ZnO/g-C_3N_4 hybrid nanoelectrodes, Balaji B. Mulik, Balasaheb D. Bankar, Ajay V. Munde, Parag P. Chavan, Ankush V. Biradar, **Bhaskar R. Sathe**	*Applied Surface Science, 2021, 538, 148120*	**7.392**
35.	Electrochemical determination of semicarbazide on cobalt oxide nanoparticles: Implication towards environmental monitoring, Balaji B. Mulik, Ajay V. Munde, Raviraj P. Dighole, **Bhaskar R. Sathe**	*Journal of Industrial and Engineering Chemistry, 2021, 93, 259-266*	**6.760**
36.	Synthesis of Metal Free Nanoporous Carbon with Few Layers Graphene Electrocatalyst for Electrochemical NO_2^- Oxidation: Implementation towards Environmental Remediation, Parag P. Chavan, Vijay S. Sapner, Ajay V. Munde, Shivsharan M. Mali and **Bhaskar R. Sathe**	*Chemistry Select, 2021, 6, 9847-9852*	**2.307**
37.	Enhanced Electrochemical NO2−Oxidation Reactions on Biomolecule Functionalized Graphene Oxide, Parag P Chavan, Vijay S Sapner, **Bhaskar R Sathe**	*Chemistry Select, 2021, 6, 6050-6055.*	**2.307**
38.	Heteroatom (N, O, and S)-Based Biomolecule-Functionalized Graphene Oxide: A Bifunctional Electrocatalyst for Enhancing Hydrazine Oxidation and Oxygen Reduction Reactions, Vijay S Sapner, Parag P Chavan, Ajay V Munde, Umar faruk S Sayyad, **Bhaskar R Sathe**,	*Energy Fuels 2021, 35, 8, 6823–6834*	**4.654**
39.	Metal-free graphene-based nanoelectrodes for the electrochemical determination of ascorbic acid (AA) and p-nitrophenol (p-NP): implication towards biosensing and environmental monitoring, Vijay S. Sapner, **Bhaskar R. Sathe**	*New J. Chem., 2021,45, 4666-4674*	**3.925**
40.	Enhanced electrocatalytic H_2S splitting on a multiwalled carbon nanotubes-graphene oxide nanocomposite, Shankar S Narwade, Shivsharan M Mali, Akash K Tapre, **Bhaskar R Sathe**	*New J. Chem., 2021,45, 20266-20271*	**3.925**
41.	Amine Functionalized Multi-Walled Carbon Nanotubes (EDA-MWCNTs) for Electrochemical Water Splitting Reactions, Shankar S Narwade, Shivsharan M Mali, **Bhaskar R. Sathe,**	*New J. Chem., 2021,45, 3932-3939*	**3.925**
42.	CZTS/MoS_2-rGO Heterostructures: An efficient and highly stable electrocatalyst for enhanced hydrogen generation reactions, Renuka V. Digraskar, Vijay S. Sapner, Anil V. Ghule, **Bhaskar R Sathe**	*J. Electroanal. Chem., 882, 2021, 114983*	**4.598**
43.	Electrocatalytic Ethanol Oxidation on Cobalt–Bismuth Nanoparticle-Decorated Reduced Graphene Oxide (Co–Bi@ rGO): Reaction Pathway Investigation toward Direct Ethanol Fuel Cells, Ajay V. Munde, Balaji B. Mulik, Parag P. Chavan, Vijay S. Sapner, Shankar S. Narwade, Shivsharan M. Mali, and **Bhaskar R. Sathe**	*J. Phys. Chem. C 2021*	**4.177**
44.	"Smart Materials for Energy Conversion and Sensor Based Technologies", Mahendra D. Shirsat, **Bhaskar R. Sathe**, Pankaj M. Koinkar	*Front. Mater. 8:626397. doi:10.3389/fmats.2021.626397*	**3.985**
45.	"Reflux temperature-dependent zinc cobaltite nanostructures for asymmetric supercapacitors", G. P. Kamble, A. A. Kashale, S. S. Kolekar, I.-W. P. Chen, **B. R. Sathe**, A. V. Ghule	*Journal of Materials Science: Materials in Electronics, **2021,** 32, 5859–5869.*	**2.779**
46.	"Graphene Oxide Decorated with Rh Nanospheres for Electrocatalytic Water Splitting" Shankar S. Narwade, Shivsharan M. Mali, Vijay S. Sapner and **Bhaskar R. Sathe**	*ACS Appl. Nano Mater. **2020,** 3, 12, 12288–12296*	**6.140**
47.	"Thermally Driven High-Rate Intercalated Pseudo capacitance of Flower-like Architecture of Ultrathin Few Layered δ-MnO_2 Nanosheets on Carbon Nano-Onions" Shobhnath P. Gupta, Bhalchandra A. Kakade, **Bhaskar R. Sathe,** Quinn Qiao, Dattatray J. Late and Pravin S. Walke	*ACS Applied Energy Materials, **2020,** 3, 11, 11398–11409*	**6.959**
48.	"Electrochemical Determination of Semicarbazide on Cobalt Oxide Nanoparticles: Implication towards Environmental Monitoring", Balaji B Mulik, Ajay V Munde, Raviraj P Dighole, and **Bhaskar R Sathe**	*Journal of Industrial and Engineering Chemistry, **2020,** 96, 259-266*	**6.760**
49.	"Cobalt Oxide Nanoparticles Decorated Reduced Graphene oxide (Co3O4-rGO): Active and Sustainable Nanoelectrodes for Water Oxidation Reaction"	*New J. Chem. **2020,** 44*	**3.925**

	Ajay V. Munde, Balaji B. Mulik, Raviraj P. Dighole and **Bhaskar R. Sathe**	*(36), 15776-15784*	
50.	"Bismuth Oxide decorated Graphene Oxide Hybrids for Catalytic and Electrocatalytic Reduction of CO_2", Balaji B. Mulik, Balasaheb D. Bankar, Ajay V. Munde, Ankush V. Biradar and **Bhaskar R. Sathe**	*Chemistry - A European Journal* ***2020,*** *26(40) 8801-8809*	**5.020**
51.	"Enhanced electrocatalytic activity towards urea oxidation on Ni nanoparticle decorated graphene oxide nanocomposite" Ajay V. Munde, Balaji B. Mulik, Parag P. Chavan, **Bhaskar R. Sathe**	*Electrochimica Acta,* ***2020****, 349 art. no. 136386*	**7.336**
52.	"Bi_2O_3 Nanoparticles Decorated Carbon Nanotube: An Effective Nanoelectrode for Enhanced Electrocatalytic 4-Nitrophenol Reduction" Ravi P. Dighole, Ajay V. Munde, Balaji B. Mulik, **Bhaskar R. Sathe**	*Frontiers in Chemistry,* ***2020,*** *8, art. no. 325*	**5.545**
53.	"L-Lysine-Functionalized Reduced Graphene Oxide as a Highly Efficient Electrocatalyst for Enhanced Oxygen Evolution Reaction" Vijay S. Sapner, Parag P. Chavan, **Bhaskar R. Sathe**	*ACS Sustainable Chemistry and Engineering,* ***2020,*** *8(14), 5524-5533*	**9.224**
54.	"Graphene oxide-based electrochemical activation of ethionamide towards enhanced biological activity", Balaji B. Mulik, Sambhaji T. Dhumal, Vijay S. Sapner, Naziya N. M. A. Rehman, Prashant P. Dixit and **Bhaskar R. Sathe**	*RSC Adv.,* ***2019****, 9, 35463*	**4.036**
55.	"Ni/NiO@rGO as an Efficient Bifunctional Electrocatalyst for Enhanced Overall Water Splitting Reaction", Shankar S. Narwade, Shivsharan M. Mali, Renuka V. Digraskar, Vijay S. Sapner, **Bhaskar R. Sathe**	*Int. J. Hydro. Energy* ***2019****, 44 (49), 27001-27009*	**7.139**
56.	Enhanced Overall Water Splitting Performance: Oleylamine Functionalized GO/Cu_2ZnSnS_4 Composite as a Nobel Metal Free and Non-precious Electrocatalyst, Renuka V. Digraskar, Vijay S. Sapner, Anil V. Ghule, **Bhaskar R. Sathe**	*ACS Omega* ***2019****, 4 (21), 18969-18977*	**4.132**
57.	"Copper Fluorapatite assisted synthesis of new 1, 2, 3-triazoles bearing benzothiazolyl moiety and their antibacterial and anticancer activities" Sambhaji T. Dhumal, Amarsinh Deshmukh, Kiran R Kharat, **Bhaskar R. Sathe,** Santosh S. Chavan, Ramrao A. Mane	*New J. Chem.****2019,*** *43 (20), 7663-7673*	**3.925**
58.	"Superior humidity sensor and photodetector of mesoporous ZnO nanosheets at room temperature" Shobhnath P. Gupta, Amit S. Pawbake, **Bhaskar R. Sathe**, Dattatray J. Late, Pravin S. Walke	*Sensors & Actuators: B. Chemical,* ***2019,*** *293, 83-92.*	**9.221**
59.	"Overall Noble Metal Free Ni and Fe doped Cu2ZnSnS4 (CZTS) Bifunctional Electrocatalytic Systems for Enhanced Water Splitting Reactions", Renuka V. Digraskar, Shivsharan M. Mali, Sakharam B. Tayade, Anil V. Ghule, and **Bhaskar R. Sathe**	*Int. J. Hydrogen Energy* ***2019,*** *44, 16, 8144-8155*	**7.139**
60.	"Facile Synthesis of Highly Porous CuO Nanoplates (NPs) for Ultrasensitive and Highly Selective Nitrogen Dioxide/Nitrite Sensing", Shivsharan M. Mali, Shankar S. Narwade, Yuraj H. Navale, Vikas. B. Patil, and **Bhaskar R. Sathe**	*RSC Advances* ***2019*** *9, 5742*	**4.036**
61.	"Heterostructural CuO-ZnO Nanocomposites: Highly Selective Chemical and Electrochemical NO2 Sensor", Shivsharan M. Mali, Shankar S. Narwade, Yuvraj H. Navale, Sakharam B. Tayade, Renuka V. Digraskar, Vikas B. Patil, Avinash S. Kumbhar, and **Bhaskar R. Sathe**	*ACS Omega* ***2019*** *4 (23), 20129-20141*	**4.139**
62.	"CZTS decorated on Graphene Oxide as an Electrocatalyst for High Performance Hydrogen Evolution Reaction", Renuka V. Digraskar, Vijay S. Sapner, Shivsharan M. Mali, Shankar S. Narwade, Anil V. Ghule, and **Bhaskar R. Sathe**	*ACS Omega* ***2019,*** *4, 7650-7657*	**4.132**
63.	"Enhanced Oxygen Evaluation Reaction on Amine Functionalized Graphene Oxide in Alkaline Medium", Vijay S. Sapner, Balaji B. Mulik, Renuka V. Digraskar, Shankar S. Narwade and **Bhaskar R. Sathe**	*RSC Advances* ***2019*** *9, 6444*	**4.036**
64.	"Electrochemical Studies of Anti-HIV Drug Emtricitabine: Oxidative Determination and Improved Antimicrobial Activity", Balaji B. Mulik, Sambhaji T. Dhumal, Rajkumar R. Harale, Kiran R. Kharat, and **Bhaskar R.**	*ChemElectroChem* ***2018,*** *23,* 3926-3931.	**4.782**

	Sathe		
65.	"Biomass-Mediated Synthesis of Cu-Doped TiO_2 Nanoparticles for Improved-Performance Lithium-Ion Batteries", Anil A. Kashale, Pravin K. Dwivedi, **Bhaskar R. Sathe**, Manjusha V. Shelke, Jia-Yaw Chang, and Anil V. Ghule	*ACS Omega* ***2018****, 3, 13676-13684*	**4.132**
66.	"Tyramine Functionalized Graphene: Metal-free Electrochemical Non-enzymatic Biosensing of Hydrogen Peroxide", Vijay S. Sapner, Parag P. Chavan, Renuka V. Digraskar, Shankar S. Narwade, Balaji B. Mulik, Shivsharan M. Mali, and **Bhaskar R. Sathe**	*ChemElectroChem* ***2018,*** *21,* 3191-3197.	**4.782**
67.	"Enhanced electrocatalytic hydrogen generation from water via cobalt-doped Cu_2ZnSnS_4 nanoparticles", Renuka V Digraskar, Vijay S. Sapner, Shankar S. Narwade, Shivsharan M. Mali, Anil V Ghule, and **Bhaskar R. Sathe**	*RSC Adv,* ***2018,*** *08,* 20341-20346.	**4.036**
68.	"Ultrasensitive and bifunctional ZnO nanoplates for an oxidative electrochemical and chemical sensor of NO_2: Implications towards environmental monitoring of the nitrite reaction", Shivsharan M Mali, Parag P Chavan, Yuvraj H Navale, Vikas B Patil, **Bhaskar R. Sathe**	*RSC Adv,* ***2018,*** *20,* 11177-11185.	**4.036**
69.	Nanomaterials engineering for hydrogen generation reactions: challenges and prospects, **Bhaskar R. Sathe**	*Proceedings of the international conference on surface engineering, 2018*	
70.	"Binder free 2D aligned efficient MnO_2 micro flowers as stable electrodes for symmetric supercapacitor applications", Anil A. Kashale, Madagonda M. Vadiyar, Sanjay S. Kolekar, **Bhaskar R. Sathe,** Jia-Yaw Chang, Hom N. Dhakal and Anil V. Ghule	*RSC Adv.,* **2017***, 7,* 36886-36894**.**	**4.036**
71.	"A Scalable and facile synthesis of carbon nanospheres as a metal free electrocatalyst for oxidation of L-ascorbic acid: alternate fuel for direct oxidation fuel cells," **Bhaskar R. Sathe**	*J. Electroanal. Chem.,* ***2017,*** *799, 15,* 609-616.	**4.598**
72.	"Enhanced hydrogen evolution reactions on nanostructured Cu_2ZnSnS_4 (CZTS) electrocatalyst," Renuka V Digraskar, Balaji B Mulik, Pravin S Walke, Anil V Ghule, and **Bhaskar R. Sathe**	*Appl. Surf. Sci.* ***2017,*** *412,* 475-481.	**7.392**
73.	"Visible light motivated synthesis of polyhydroquinoline derivatives using CdS nanowires," Rajkumar R. Harale, Praveen V. Shitre, **Bhaskar R. Sathe** and Murlidhar S. Shingare	*Res. Chem. Intermed.* ***2017,*** *43,* 3237-3249**.**	**3.134**
74.	"Silver nanoparticles sensitized C_{60} ($Ag@C_{60}$) as efficient electrocatalysts for hydrazine oxidation: Implication for hydrogen generation reaction", Shankar S. Narwade, Balaji B. Mulik, Shivsharan M. Mali, **Bhaskar R. Sathe**	*Appl. Surf. Sci.* **2017,** 396, 939.	**7.392**
75.	"Silica nanosphere-graphene oxide (SiO_2-GO) hybrid catalyzed facile synthesis of functionalized quinoxaline derivatives", Praveen V. Shitre, Rajkumar R. Harale, **Bhaskar R. Sathe** and Murlidhar S. Shingare	*Res. Chem. Intermed.* ***2017,*** *43,* 829-841.	**3.134**
76.	"Temperature dependent fabrication of cost-effective and nontoxic Cu_2ZnSnS_4(CZTS) thin films for solar cell", Renuka Digraskar, Ketan Gattu, **Bhaskar R. Sathe**, Anil V. Ghule, and Ramphal P. Sharma	*AIP Conference Proceedings*, **2016,** 1, 1728.	**0.402**
77.	"Microwave assisted synthetic approach for 1, 8-dioxo- octahydroxanthene derivatives under solvent free condition", Praveen V. Shitre, Rajkumar R. Harale, **Bhaskar R. Sathe** and Murlidhar S. Shingare	*Chem. & Bio. Inter,* **2016,** *6,* 137.	**5.168**
78.	"Pd nanoparticles: an efficient catalyst for the solvent-free synthesis of 2, 3-disubstituted-4-thiozolidinones", Rajkumar R. Harale, Praveen V. Shitre, **Bhaskar R. Sathe** and Murlidhar S. Shingare	*Res. Chem. Intermed.* **2016,** *42,* 6695.	**3.134**
79.	"Methanol electro-oxidation on nanostructured Rh Network", **Bhaskar R. Sathe**	*Energy &Environ Focus* **2015**, *4,* 196.	
80.	Synthetic strategies for 1, 2, 3-triazole based bioactive compounds Authors, MH Shaikh, DD Subhedar, AB Danne, RA Mane, MS Shingare, **BR**	*Journal Organic Chem. Curr. Res, 2015, 4, 140-141*	**3.81**

	Sathe, BB Shingate		
81.	"Cobalt-embedded nitrogen-rich carbon nanotubes efficiently catalyze H_2 evolution reaction at all pH Values", Xiaoxin Zou, Juan Su, Rafael Silva, Anandarup Goswami, **Bhaskar R. Sathe** and Tewodros Asefa	*Angew. Chem. Int. Ed.* **2014**, *126*, 4416.	**16.823**
82.	"Metal-free B-doped graphene with efficient electrocatalytic activity for H_2 evolution reaction", **Bhaskar R. Sathe**, Xiaoxin Zou and Tewodros Asefa	*Catal. Sci. Technol.* **2014**, *4,* 2023.	**6.177**
83.	"Efficient oxygen evolution reaction catalyzed by low-density Ni-doped Co_3O_4 nanomaterials derived from metal-embedded graphitic C_3N_4", Xiaoxin Zou, Rafael Silva, Anandarup Goswami, **Bhaskar R. Sathe** and Tewodros Asefa	*Chem Commun,* **2013,** *49,* 7522.	**6.065**
84.	"Rhodium nanoparticle-carbon nanosphere hybrid material as an electrochemical hydrogen sensor" **Bhaskar R. Sathe**	*RSC Adv.* **2013,** *3,* 5361.	**4.036**
85.	"High aspect ratio Rh nanostructures for tunable electrocatalytic performance" **Bhaskar R. Sathe**	*Phys. Chem. Chem. Phys.,* **2013,** *15*, 7866.	**3.945**
86.	"Significant enhancement of HCOOH oxidation using Rh nanostructures" Beena K. Balan, and **Bhaskar R. Sathe**	*J. Nanosci. Nanotechnol.* **2012,** *12,* 8994.	**1.28**
87.	"Correlation of morphology/shape with electrocatalytic activity of Rh nanostructures synthesized by CVD approach" **Bhaskar R. Sathe**	*AIP Advances* **2012**, *2,* 042122.	**1.697**
88.	A facile approach for shape selective synthesis of rhodium nanostructures and conductivity studies, **Bhaskar R Sathe**	*AIP advances 2012, 2, 042122*	**1.697**
89.	"Capping induced morphology evolution of Rh nanostructures and their electrocatalytic studies" **Bhaskar R. Sathe**	*RSC Adv.* **2012**, *2,* 3735.	**4.036**
90.	"A novel catalyst-free synthesis of vertically aligned silicon nanowire-carbon nanotube heterojunction arrays for high performance electron field emitters", Vinayak S. Kale, **Bhaskar R. Sathe**, Ajay Kushwaha, Mohammed Aslam and Manjusha V. Shelke	*Chem. Commun.* **2011**, *47,* 7785.	**6.065**
91.	"Enhanced electrocatalytic performance of interconnected Rh nano-chains towards formic acid oxidation" **Bhaskar R. Sathe**, Beena K. Balan and Vijayamohanan K. Pillai	*Energy Environ. Sci.* **2011,** *4,* 1029.	**39.714**
92.	"Synthesis of Rh-carbon nanotube based heterostructures and their enhanced field emission characteristics" **Bhaskar R. Sathe,** Bhalchandra A. Kakade, Ajay Kushwaha, Mohammed Aslam and Vijayamohanan K. Pillai	*Chem. Commun.* **2010,** *46,* 5671. ***[Selected as a hot article]***	**6.065**
93.	"Tunable optical features from self-organized Rh nanostructures" **Bhaskar R. Sathe**, Beena K. Balan and Vijayamohanan K. Pillai	*Appl. Phys. Letts.* **2010,** *96,* 233102.	**3.971**
94.	"Effect of Fe_3O_4 on morphology of Fe–SnO_2 hyperbranched heterostructures" **Bhaskar R. Sathe,** Pravin Walke, Imtiaz S. Mulla and Vijayamohanan K. Pillai	*Chem Phys Letts.* **2010,** *493,* 121.	**2.719**
95.	"Fabrication of In-doped SnO_2 nanowire arrays and its field emission investigations" Ashok Bhise, Dattatray Late, **Bhaskar R. Sathe**, Mahendra A. More, I. S. Mulla and Vijayamohanan K. Pillai and D. S. Joag	*Journal of Exp Nanosci.* **2010,** *5,* 527.	**3.075**
96.	"Field emission investigation of single Fe-doped SnO_2 wire" Ashok Bhise, Dattatray Late, **Bhaskar R. Sathe**, I. S. Mulla and Vijayamohanan K. Pillai	*Solid State Sciences* **2009,** *211,* 1114.	**3.752**
97.	"Near-complete phase transfer of single-wall CNTs by covalent functionalization using oxalyl chloride" Bhalchandra A. Kakade, Sanjay D. Patil, **Bhaskar R. Sathe,** Suresh P. Gokhale and Vijayamohanan K. Pillai	*J. Chem. Sci.* **2009**, *120,* 599.	**2.150**
98.	"A facile, single-step route to synthesize Sb-doped SnO_2 nanowires and hyper-branched structures" **Bhaskar R. Sathe,** Pravin Walke, Vivek J. P., Mrudula Patil, Imtiaz S Mulla and Vijayamohanan K. Pillai	*Sci of Adv Mater* **2009,** *1,* 38.	**1.067**
99.	"Preparation and characterization of Rh nanostructures through the evolution of microgalvanic cells and their enhanced electrocatalytic activity for HCHO oxidation" **Bhaskar R. Sathe**, Dhanraj B. Shinde and Vijayamohanan K. Pillai	*J. Phys. Chem. C* **2009,** *113,* 9316**.**	**4.177**

100.	"High-purity synthesis of scrolled mats of multi-walled CNTs using temperature modulation" Bhalchandra A. Kakade, Hatem Allouche, Subhramania Mahima, **Bhaskar R. Sathe** and Vijayamohanan K Pillai	*Carbon,* **2008,** *46,* 567.	**11.307**
101.	"Selective cis-dihydroxylation of olefins using recyclable homogeneous molybdenum acetylide catalyst", Ankush V. Biradar, **Bhaskar R. Sathe,** Mohan K. Dongare and Shubhangi B. Umbarkar	*J. Mole. Cat. A: Chem.* **2008,** *285,* 111.	**5.062**
102.	"Electrochemical sensing of SO_2: a comparison using dodecanethiol and citrate capped Au nanoclusters", **Bhaskar R. Sathe**, Mandar S. Risbud, Imtiaz S. Mulla and Vijayamohanan K. Pillai	*J. Nanosci. Nanotech.* **2008,** *8,* 3184.	**1.28**
103.	"Synthesis and enhanced field emission from hexagonal Rh", **Bhaskar R. Sathe**, Bhalchandra A. Kakade, Dattatray Late, Dilip Joag, I. S. Mulla, and Vijayamohanan K. Pillai	*Appl. Phys. Letts.* **2008,** *92,* 253106.	**3.971**
104.	"Cu phthalocyanine films deposited by liquid interface recrystallization technique (LLIRCT)", K. R. Patil, S. D. Sathaye, R. Hawaldar, **Bhaskar R. Sathe,** A. B. Mandale and A. Mitra	*J. Colloid Interface Sci.* **2007,** *315,* 747.	**9.965**
105.	"Template-assisted synthesis of RuO_2 nanoneedles: electrical and electrochemical properties", Mahima Subhramannia, Beena K. Balan, **Bhaskar R. Sathe**, Imtiaz S. Mulla and Vijayamohanan K. Pillai	*J. Phys. Chem. C* **2007,** *111,* 16593.	**4.177**
106.	"Surface state-mediated electron transfer at nanostructured ZnO multipod/electrolyte interfaces", Meera Parthasarathy, Niranjan S. Ramgir, **Bhaskar R. Sathe**, Imtiaz S. Mulla, Vijayamohanan K. Pillai	*J. Phys. Chem. C* **2007,** *111,* 13092.	**4.177**
107.	"Quantized double layer charging behavior of $Rh_{2057}(TDA)_{321}$ clusters using differential pulse and cyclic voltammetry", Bhalchandra A. Kakade, Shashidhar Shintri, **Bhaskar R. Sathe**, S. B. Halligudi, and Vijayamohanan K. Pillai	*Adv. Mater.* **2007,** *19,* 272.	**32.086**
108.	"Highly sensitive nanostructured Pt electrocatalysts for CO oxidation: implications for CO sensing and fuel cell performance", **Bhaskar R. Sathe,** Mandar S. Risbud, Sanjay Patil, K. S. Ajayakumar, R. C. Naik, I. S. Mulla, Vijayamohanan K. Pillai	S*ensors and Actuators: Physical* **2007,** *138,* 1.	**4.291**

Book and Book Chapters:

Sr. No.	Title and Details	Author Name	Publisher	Year of Publication
Book				
1.	CZTS Nanocrystals: New Scientific Strategies and Electrocatalytic Water Splitting Reactions	R. V. Digraskar, A. V. Ghule and **Bhaskar R. Sathe**	Eliva Press Europe	**2022**
Book Chapters				
1.	Flexible and Wearable Electrochemical Biosensors based on 2D Materials	Balaji Mulik, Pravin S. Walke and **Bhaskar R. Sathe**	Elsevier	**2022**
2.	Complex Metal Oxide Compounds and Composites Designed for High-Temperature Solid Electrolyte based Oxygen, Hydrogen Gas Sensors, on book topic "Complex and composite metal oxides for gas, VOCs and humidity sensors"	Vijay S. Sapner, Pravin S. Walke and **Bhaskar R. Sathe**	Elsevier	**2022**
3.	Supercapacitors based on two-dimensional metal oxides, hydroxides, and its graphene-based hybrids, in Book-Fundamentals and Supercapacitor Applications of 2D Materials, (ISBN 978-0-12-821993-5), DOI: 10.1016/B978-0-12-821993-5.00008-X	Shivsharan M. Mali, Dattatray J. Late, **Bhaskar R. Sathe**	Elsevier	**2021**

4.	Engineering two-dimensional materials for high-performance supercapacitor devices, in Book - Fundamentals and Supercapacitor Applications of 2D Materials, ISBN 978-0-12-821993-5, DOI: 10.1016/B978-0-12-821993-5.00008-X	Pravin S. Walke, Shobhnath P. Gupta, Harishchandra Nishad, **Bhaskar R. Sathe** and Dattatray J. Late	Elsevier	**2021**
5.	Bioactive Ceramic Composite Material Stability, Characterization and Binding to Bone, in Book- Fundamental Biomaterials: Ceramics Edited by Sabu Thomas, Preetha Balakrishnan and M. S. Sreekala, (ISBN-978-0-08-102203-0).	V. H. Ingole, **Bhaskar R. Sathe** and A. V. Ghule	Elsevier	**2019**

Research Guidance (Working/Synopsis Submission/Awarded):

Sr. No.	Title of the Thesis	Name of Candidate	Ph.D./ Project Fellow	Sponsoring Agency
Working				
1.	Carbon nanotube and its polymer composite materials for biosensor studies	Mr. Surendra J. Kokane	Ph.D. Fellow	Department of Chemistry
2.	Green nanotechnology approach for synthesis of metal and metal oxide nanoparticles, their characterization and engineering for technological applications.	Mrs. Kalyani A. Ghule	Ph.D. Fellow	Department of Nanotechnology
3.	Functionalization of Carbon Nanostructures for Energy and Environmental Applications	Mrs. Pratisksha Tanwade	Ph.D. Fellow (CSIR/UGC-NET)	CSIR, New Delhi
4.	Chemically Sustainable Metal Nanoparticles Functionalized CZTS (Cu_2ZnSnS_4) based Nanostructures for Efficient Photoelectrocatalytic Water Splitting	Mr. Somnath Dhawale	Project Fellow (CSIR-Project JRF-NET-LS)	CSIR, New Delhi
5.	Design and Fabrication of Non-Metal Doped Functional Nanomaterials for Electrochemical Water Splitting	Mrs. Rohini Kale	Ph.D. Fellow	Department of Chemistry
6.	Electrochemical Ammonia and Urea Formation on Functionalized Carbon Nanostructures	Mrs. Gauri S. Mishra	Ph.D. Fellow	Department of Chemistry
Thesis Submitted				
	Title of the Thesis	**Name**	**Subject**	**Date of Submission**
7.	Carbon nanotube based electrocatalysts for nitrate reduction reactions	Mr. Raviraj P. Dighole	Ph.D. Fellow	Department of Chemistry
Ph.D. Awarded				
	Title of the Thesis	**Name**	**Subject**	**Date of Awarded**
1.	Surface functionalization of Cu_2ZnSnS_4 (CZTS) for hydrogen generation	Dr. Renuka V. Digraskar	Nanotechnology	**August 2019**
2.	Graphene and its hybrid nanostructures for electrochemical gas sensor studies	Dr. Shivsharan M. Mali	Chemistry	**March 2020**
3.	Earth abundant metal functionalized graphene-based hybrid electrocatalysts for CO_2 reduction	Dr. Balaji B. Mulik	Chemistry	**October 2020**
4.	Multifunctional heterostructures comprised of carbon nanostructures and biomolecules synthesis, characterization and electrochemical applications	Dr. Vijay S. Sapner	Chemistry	**April 2021**

5.	Synthesis, Characterization of Metal Free Nanoelectrodes for Hydrogen Evolution Reactions	Dr. Shankar S. Narwade	Chemistry	**June 2021**
6.	Synthesis of carbon nanostructures for electrocatalytic CO_2 Reduction	Dr. Ajay Munde	Chemistry	**January 2022**
7.	Fabrication, characterization of multifunctional nano-materials for nitrogen cycle electrocatalysis	Mr. Parag P. Chavan	Chemistry	**November 2022**

Since 2008, around **10 students/year** guiding for their **Master Research Project** from specializations of Physical and Analytical Chemistry at Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. **Resource persons/Chairperson/Judge in the International/National conference/Seminar/workshop/Refresher courses.** Delivered more than **70 invited talks, 40 oral/poster** presentations in international/national conferences.

Sr. No.	**Title of Invited talks**	**Name of conference/ Seminar / workshop/ Refresher**	**National/International / Local**	**Name of Organizing University / College/ Institute**	**Date dd/mm/yy**
Resource Persons					
1.	Functional Nanoelectrodes for Hydrogen Generation and Fuel Cell Reactions (IT-44; EIHE-2020)	Conference on Electrochemistry in Industry, Health, and Environment (EIHE 2020)	**International**	DAE-Convention Centre, Anushaktinagar, BARC, Mumbai, India	**January 2020**
2.	Energy and Environmental Issues From Electrochemistry Perspectives (IT-VI RTIP2R, 2020; pp 119)	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
3.	Functional Nano-electrodes for Fuel Cell Reaction	International Workshop On Recent Trends in Functional Materials and Research Opportunities in Taiwan and other foreign Universities	**International**	RUSA-Centre for Advanced Sensor Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS) India	**January 2020**
4.	Molecular Spectroscopy and Electrochemistry	Two Days State Level Workshop on NET/SET Preparation	**State**	Damani Bhairuratan Fatehchand Dayanand College of Arts and Science Solapur	**February 2019**
5.	Nanoscience and Environmental Issues: Challenges, Prospects and Societal Demands	Nanostructured Materials and Nanotechnology -2018	**National**	Marathwada Shikshan Prasarak Mandal's Shri Muktanand College Gangapur	**December 2018**
6.	Nanoscience and Nanotechnology: Fundamentals to Applications	Special Lecture Series –PG Students	**Local**	Marathwada Shikshan Prasarak Mandal's Shivchhatrapati College Cidco, N-3, Aurangabad (MH) -431003	**January 2019**
7.	Nanoscience and Environmental Issues: Challenges, Prospects and Societal Demands	Recent Innovative Trends of Nanomaterials in Chemical, Biological and Physical Sciences	**Regional**	Modern college of Arts, Science and Commerce Shivajinagar, Pune and Savitribai Pune University, Pune	**September 2018**
8.	National and International Funding	Refresher Course in Disaster Management	**Local**	UGC-HRDC Academic Staff College, Dr. BA.	**September 2018**

	Resources			Marathwada University, Aurangabad	
9.	Nanomaterials Engineering for Hydrogen Generation Reactions: Challenges and Prospects	International Conference on Surface Engineering (INCOSURF-2018)	**International**	Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru, India	**August 2018**
10.	Avishkar: Interuniversity Research Competition	One Day Training Program for Avishkar -2018	**Local**	Balbhim Arts, Science and Commerce College, Beed	**August 2018**
11.	Energy and Environmental Issues: Challenges and Societal Demands	Refresher course in Environmental Studies	**Local**	UGC-HRDC Academic Staff College, Dr. BA. Marathwada University, Aurangabad	**March 2018**
12.	Nanotechnology: Solutions for Futuristic Energy Demands	Invited talk and Chief guest for the Inaugural function of Science Association	**Local**	Rajarshi Shahu Mahavidyalya, Latur (MH) India	**March 2018**
13.	Energy Conversion and Environmental Issues: Challenges, Prospects and Societal Demands	National Conference on Resent Trends in Nanoscience and Nanotechnology for clean and sustainable development	**National**	Vasant Mahavidyalya, Kaij, Beed (India)	**February 2018**
14.	Current Status of Indian Science	National Social Services (NSS) –PG Unit Special Camp	**Local**	Dr. BA. Marathwada University, Aurangabad	**February 2018**
15.	Nanostructured Carbon electrocatalysts for Water Splitting Reactions	Conference on Electrochemistry in Advanced Materials, Corrosion and Radiopharmaceuticals (CEAMCR 2018)	**International**	DAE Convention Centre, Anushaktinagar, BARC, Mumbai, India	**February 2018**
16.	Nanomaterials Engineering for Energy Conversion and Environmental Issues: Challenges and Prospects	International Conference on Advances in Chemical Sciences (ICACS 2018)	**International**	Department of Chemistry, Shivaji University, Kolhapur, India	**February 2018**
17.	Nanoscience and Nanotechnology: Solutions for Futuristic Societal Demands	National conference on, "Modern prospectives in chemical science and research (MPCSR-2018)	**National**	Shivaji Mahavidyalya Parbhani, Nanded (India)	**January 2018**
18.	Development of Multifunctional Hybrid Electrocatalysts: Hydrogen Generation Reactions	National Conference on Water Management and Purification	**National**	Mahatma Phule Mahavidyalya Pimpari, Waghere, Pune (MH) India	**January 2018**
19.	Environmental and Energy Issues: Technological Solutions	National Social Services (NSS) UG Special Unit at Changatpuri	**Local**	Pratishthan Mahavidyalya Paithan, Aurangabad (MH) India	**January 2018**

20.	Carbon Based Hybrid Electrocatalysts for Hydrogen Evolution Reaction	Second International Conference on Electrochemical Science and Technology	**International**	Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru (KT), India	**August 2017**
21.	Environmental issues and solutions	Lecture series entitled, "Nanotechnology: A Cutting-edge-technology"	**Local**	Department of Nanotechnology, Dr. BA Marathwada University, Aurangabad (MS)	**March 2017**
22.	Nanotechnology: Solutions for Futuristic Energy Demands	Refresher Course-ICT Applications on "Electron Spectroscopy"	**Local**	UGC-HRDC Academic Staff College, Dr. BA. Marathwada University, Aurangabad	**March 2017**
23.	Energy Conversion and Environmental Issues: Challenges, Prospects and Societal Demands	State Level Seminar on, "Recent Trends in Chemistry"	**National**	Yashwantrao Chavan College of Arts, Commerce and Science College Sillod, Dist Aurangabad	**February 2017**
24.	Molecular Spectroscopy and Advanced Electrochemistry	State level workshop on, "Gateway to NET/SET Exams in Chemical Sciences"	**National**	Department of Chemistry, Rayat Shikshan Sanstha's, Maharaja Jivajirao Shinde Mahavidyalya Shrigonda, Dist. Ahmednagar (MS)	**January 2017**
25.	Nanoscience and Nanotechnology: Solution for Futuristic Energy and Environmental Demands	Green Chemistry Education for a Sustainable Future of Humanity (GCESFH-2016)	**National**	Pravara Rural Education Society's Arts, Commerce and Science College, Satral, Ta. Rahuri, Dist-Ahmednagar (MS)	**December 2016**
26.	Development of Multifunctional Hybrid Electrocatalysts: Hydrogen Generation Reactions	Twelfth ISEAC Discussion Meet on Electrochemistry and its Applications (12^{th} ISEAC-DM-2016)	**International**	Acres Club, Chembur, Mumbai (MS)	**December 2016**
27.	Nanotechnology: Solutions for Futuristic Energy Demands	Chief Guest for inaugural function for science association 2016 and invited lecture on nanotechnology and global challenges	**Local**	RP College Osmanabad	**December 2016**
28.	Fulbright-Nehru Fellowships and other Opportunities in the U.S.	Special Winter school Programme	**Local**	UGC-HRDC Academic Staff College, Dr. BA Marathwada University, Aurangabad	**November 2016**
29.	Nanoscience and Nanotechnology: Advances and Challenges	Refresher Course in Basic Sciences	**Local**	UGC-HRDC Academic Staff College, Dr. BA Marathwada University, Aurangabad	**September 2016**
30.	Nanotechnology for Energy Conversion: Advances and Challenges	One day Faculty Orientation Programme, "Dimensions of Research Development," in Material Science	**National**	Vinayakrao Patil Mahavidyalya, Vaijapur, Aurangabad (MH), India	**July 2016**

31.	Nanoscience and Nanotechnology: INTERDISCIPLINARY THRILL	Two days National Conference on, "Emerging Trends and Challenges in Synthetic and Nano-Chemistry (e-SynanoChem-16)"	**National**	Rajarshi Shahu Mahavidyalya, Latur (MH), India	**March 2016**
32.	Carbon based Metal Free Nanostructured Hybrid Electrocatalysts for Water Reduction Reactions	Fourth international Conference on Frontier in Nanoscience and Technology, Organized by Department of Physics and Inter university centre for nanomaterials and Devices (IUCND)	**International**	Cochin university of Science and Technology (CUSAT) Cochin, Kerala, India	**February 2016**
33.	Career Opportunities in Science: Key Success	Mentor Speaker for INSPIRT-2016 on, "Career Opportunities in Science: Key Success"	**Local**	Marathwada Institute of Technology (MIT), Aurangabad	**March 2016**
34.	Why to do Science: Humanity's Challenges	Guest lecture on, "Why to do Science: Humanity's Challenges"	**Local**	Shivaji Art's, Commerce and Science College Kannad, Aurangabad	**March 2016**
35.	Molecular Spectroscopy and Advanced Electrochemistry	Guest lecture on, "Concept in Physical Chemistry"	**Local**	Department of Chemistry, Yashwantrao Chavan College Art's, Commerce and Science, Sillod, Aurangabad	**January 2016**
36.	Material Science: Interdisciplinary Thrill	National conference on "Recent Challenges in Advanced Material and Green Chemistry" (RCAMGC-2015)	**National**	Department of Chemistry, Dr. BA Marathwada University, Sub-campus Osmanabad, India	**December 2015**
37.	Carbon Based Hybrid Electrocatalysts for Hydrogen Evolution Reaction	Invited Lecture in "Sir C. V. Raman Lecture Workshop"	**Local**	Department of Chemistry, Dr. BAM University Aurangabad Sub-Campus Osmanabad	**February 2015**
38.	Fulbright-Nehru Fellowships and other Opportunities in the U.S.	Invited Speaker for UGC-Sponsored 109th Orientation Programme	**Local**	UGC Academic Staff College, Dr. BA. Marathwada University, Aurangabad	**July 2015**
39.	Nanoscience and Nanotechnology: INTERDISCIPLINARY THRILL	Resource person for UGC Sponsored Seminar on, "Emerging Trends and Challenges in Chemical Sciences"	**National**	Arts, Commerce and Science College, Kille Dharur, Beed	**January 2015**

40.	Development of Multifunctional Hybrid Electrocatalysts: Hydrogen Generation Reactions	Resource Person for National Conference on "Advances in Chemical Science with Special Reference to Molecular Spectroscopy, Material science and Organic Electronics" (NCACS-2014)	**National**	Fergusson College, Pune, India	**December 2014**
41.	Nanotechnology: Solutions for Futuristic Energy Demands	Resource Person for National Seminar on, "Nanoscience-A Science of 21st Century (NSTFC-2014)"	**National**	Rayat Shikshan Sanstha's Mahatma Phule Arts, Science and Commerce College, Panvel, India	**November 2014**
42.	Fulbright-Nehru Fellowships and other International Opportunities	UGC-Sponsored Special Winter School Programme	**Local**	UGC Academic Staff College, Dr. BA Marathwada University, Aurangabad	**November 2014**
43.	Fulbright-Nehru Fellowships and other Opportunities in the U.S.	Pre-PhD Course Work	**Local**	Department of Microbiology, Dr. BA Marathwada University, Sub Campus Osmanabad	**November 2014**
44.	Nanoscience and Nanotechnology: Interdisciplinary Thrill	Invited talk on "Nanotechnology: Solutions for Futuristic Energy Demands"	**National**	Department of Chemistry, Shree Venketashwara University, Tirupati, India	**November 2014**
45.	Nanotechnology: Solutions for Futuristic Energy Demands	Invited Speaker for UGC Sponsored Refresher Course	**Local**	Department of Chemistry/Chemical Technology/Pharmacy and UGC Academic Staff College, Dr. BA. Marathwada University, Aurangabad	**June 2014**
46.	Research in the Field	Invited as a guest in discussion forum, "Research in the Field"	**International**	Centers for Global Advancement and International Affairs, Rutgers, The State University of New Jersey, USA	**January 2013**
47.	Responsible and Ethical Research in International Settings	Invited as a guest speaker for, "Responsible and Ethical Research in International Settings"	**International**	Centers for Global Advancement and International Affairs, Rutgers, The State University of New Jersey, USA	**March 2013**
48.	Formic Acid Oxidation; Structure-Activity Correlation of Rh Nanostructures	National conference on sustainable chemistry: challenges and opportunities	**National**	Dr. BA. Marathwada University, Sub-campus Osmanabad, India	**January 2012**
49.	Nanotechnology for Energy Applications	Guest for Prize Distribution Ceremony of	**Local**	Moolji Jaitha College Jalgaon, India	**March 2011**

		Chemistry Talent Search Examination: 2011-12			
50.	Chemical Sciences: Molecular Spectroscopy and Electrochemistry	Two days workshop under UGC Scheme for SET-NET examination	**National**	Department of Chemistry, Dr. BA. Marathwada University Aurangabad Sub-Campus Osmanabad	**March 2010**
51.	Chemical Sciences: Molecular Spectroscopy and Electrochemistry	UGC Scheme for SET-NET	**National**	Yeshwant College Nanded, India	**February 2012**
52.	Nanoscience and Nanotechnology: Multidisciplinary Thrill	Chemistry for Advanced Materials	**State**	Department of Chemistry Arts, Science and Commerce College, Naldurg, India	**March 2010**
53.	Nanotechnology: Solutions for Futuristic Societal Demands	Resent Advances in Chemical Kinetics, Co-ordination and Technology (RACKCNC-2009)	**National**	Rajarshi Shahu Mahavidyalaya, Latur, India	**January 2009**

Chairperson/Judge

1.	Invited as a Session Chairman and Examiner (Oral) in National Conference on Innovation in Nanomaterials and Nanotechnology (NCINMNT-2017)	**National**	Rajarshi Shahu Arts, Commerce and Science College Pathri, Aurangabad (MS)	**January 2017**
2.	Second International Conference on Electrochemical Science and Technology (ICONEST-2017)	**International**	Electrochemical Society of India and Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bengaluru, India	**August 2017**

Research paper presented in Conference, Seminar (Oral/Poster):

Sr. No.	Title of Research paper	Name of conference/ Seminar/workshop	National/International /Local	Name of Organizing University/College/Institute	Date of mm/yy
1.	Amine functionalized GO/CZTS as a Non-precious Electrocatalyst for Overall Water Splitting (Paper ID-268 RTIP2R 2020 pp 133)	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
2.	Electrochemical H_2S Gas Sensing by Heterostructural Ce/GO Nanocomposites **(Paper ID-269 RTIP2R 2020 pp 134)**	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
3.	Enhanced Electrochemical NO_2^- Oxidation Reactions on Biomolecule Functionalized Graphene Oxide (Paper ID-301 RTIP2R 2020 pp 145)	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
4.	Cobalt Oxide decorated reduced Graphene oxide (CO_3O_4@rGO)	3rd International Conference on Recent Trends in Image Processing and Pattern	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb	**January**

	Nanoelectrodes for Enhanced Electrocatalytic Water Oxidation (Paper ID-302 RTIP2R 2020 pp 146)	Recognition (RTIP2R, 2020)		Ambedkar Marathwada University, Aurangabad	**2020**
5.	Cyclic Voltammetric Determination of Semicarbazide (SCB) on Cobalt Oxide Nanoparticles: Implication towards Electrochemical Sensor (Paper ID-303 RTIP2R 2020 pp 147)	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
6.	Metal free Graphene Based Nanoelectrodes for Determination of Organic Pollutants: Implications towards Biosensing and Environmental Monitoring (Paper ID-306 RTIP2R 2020 pp 148)	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
7.	Multiwalled Carbon Nanotubes-Graphene Oxide Nanocomposite: Electrocatalytic H_2 Generation from H_2S (Paper ID-307 RTIP2R 2020 pp149)	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
8.	Bi_2O_3 Nanoparticles decorated on Carbon Nanotube are Effective Nanoelectrode for Enhanced Electrocatalytic 4-Nitrophenol Reduction (Paper ID-309 RTIP2R 2020 pp 150)	3rd International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R, 2020)	**International**	Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	**January 2020**
9.	Electrochemically & Solid state NO_2 Gas Sensing Properties of Thick Films ZnO Nanoparticles Mali S.M. and Dr. Bhaskar R. Sathe **(Oral Presentation)**	Conference on Electrochemistry in Advanced Materials, Corrosion and Radiopharmaceuticals (CEAMCR 2018)	**International**	DAE Convention Centre, Anushaktinagar, Bhabha Atomic Centre, Mumbai, India.	**February, 2018**
10.	Electrochemically & Solid-state Gas Sensing Properties of ZnO Nanoplates. Mali S. M., Balaji Mulik and Dr. Bhaskar R. Sathe, **(Poster Presentation)**	International Conference on Advances in Chemical Sciences (ICACS 2018)	**International**	Department of Chemistry, Shivaji University, Kolhapur – 416004	**February 2018**
11.	Electrochemical Study of Carbon-Based Nanomaterial with Biomolecules. Vijay S. Sapner & Dr. **Bhaskar R. Sathe**	National Conference on "Frontiers in Chemical Sciences and Drug Development" (NCFCSDD-2017)	**National**	Department of Chemistry, Dr. BA. Marathwada University Aurangabad	**March 2017**

	(Poster Presentation)				
12.	Electrochemical Non-Enzymatic Hydrogen Peroxide Reduction. Vijay S. Sapner and **Dr. Bhaskar R. Sathe** **(Oral Presentation)**	International Conference on Advances in Chemical Sciences (ICACS 2018)	**International**	Department of Chemistry, Shivaji University, Kolhapur – 416004	**Februar y 2018**
13.	Effective De-Nitrification: A Way to Protect an Environment Parag P. Chavan and Dr. Bhaskar R.Sathe **(Poster Presentation)**	National Conference on "Frontiers in Chemical Sciences and Drug Development" (NCFCSDD-2017)	**National**	Department of Chemistry, Dr. BA. Marathwada University Aurangabad	**March 2017**
14.	Non-Enzymatic Hydrogen Peroxide Reduction Using Metal Free Tyramine-Graphene Electrocatalyst Parag P. Chavan, Vijay S. Sapner and Bhaskar R. Sathe **(Poster Presentation)**	Conference on Electrochemistry in Advanced Materials, Corrosion and Radiopharmaceuticals. (CEAMCR 2018)	**International**	DAE Convention Centre, Anushakti Nagar, Bhabha Atomic Centre, Mumbai, India.	**Februar y 2018**
15.	Ag@C_{60} nanoparticles sensitized electrocatalyst for direct hydrogen fuel cell reactions. Shankar S. Narwade and Bhaskar R. Sathe **(Poster Presentation)**	International Conference on Advanced Rechargeable Batteries & allied Materials-2017(ICARBM-2017)	**International**	Centre for Materials for Electronics Technology (C-MET), Pune, Panchawati, Off Pashan Road, Pune 411 008, INDIA	**March 2017**
16.	Fullerene Based Silver Nano Particles as an Electroctalyst for Hydrogen Generation Reactions. Shankar S. Narwade, Parag P. Chavan, and Bhaskar R. Sathe **(Paper Presentation)**	National Conference on Frontiers in Chemical Sciences and Drug Development (NCFCSDD-2017)	**National Conference**	Department of Chemistry, Dr. BA. Marathwada University Aurangabad	**March 2017**
17.	NiO@GO Heterostructures for Electrocatalytic Water Oxidation Reaction. Shankar S. Narwade and Bhaskar R. Sathe **(Poster Presentation)**	International Conference on Advances in Chemical Sciences (ICACS 2018)	**International**	Department of Chemistry, Shivaji University, Kolhapur – 416004	**Februar y 2018**
18.	Efficient NiO@GO Electrocatalyst for Hydrogen Evolution Reaction (HER) in Acidic Medium. Shankar S. Narwade and Bhaskar R. Sathe **(Poster Presentation)**	Conference on Electrochemistry in Advanced Materials, Corrosion and Radiopharmaceuticals. (CEAMCR 2018)	**International**	DAE Convention Centre, Anushakti Nagar, Bhabha Atomic Centre, Mumbai, India.	**Februar y 2018**
19.	Bismuth Carbon Nanotubes Hybrid Electro catalyst for	International Conference on Advances in Chemical	**International**	Department of Chemistry, Shivaji University, Kolhapur	**Februar y 2018**

	Hydrogen Evolution Reaction. Ajay V. Munde and **Bhaskar R. Sathe (Poster Presentation)**	Sciences (ICACS 2018)		– 416004	
20.	Nanostructured Ni@Bi Core Shell: Novel Electro Catalyst for Hydrogen Generation Reaction. Ajay V. Munde and **Bhaskar R. Sathe (Poster Presentation)**	Conference on Electrochemistry in Advanced Materials, Corrosion and Radiopharmaceuticals. (CEAMCR 2018)	**International**	DAE Convention Centre, Anushakti Nagar, Bhabha Atomic Centre, Mumbai, India.	**February 2018**
21.	Platinum Based Hybrid Electro catalyst for CO_2 Reduction Balaji B. Mulik and **Bhaskar R. Sathe (Oral Presentation)**	Recent Challenges in Advanced Materials and Green Chemistry (RCAMGC 2015)	**National**	Dr. Babasaheb Ambedkar Marathwada University, Sub-Campus, Osmanabad, India.	**December 2015**
22.	Copper- Iridium bimetallic monohybrid for electrochemical reduction of CO_2; Balaji B. Mulik and **Bhaskar R. Sathe (poster Presentation)**	17th CRSI National Symposium in Chemistry at CSIR-NCL Pune	**National**	CSIR- National Chemical Laboratory, Pune, India.	**February 2015**
23.	Copper-Bismuth Hybrid Electrocatalyst for CO_2 Reduction Reactions Balaji B. Mulik, Vijay S. Sapner and **Bhaskar R. Sathe (poster Presentation)**	Advanced Rechargeable Batteries & Allied Materials ICARBM-2017	**International**	Centre for Materials for Electronics Technology (C-MET), Pune, Panchawati, Off Pashan Road, Pune, 411008, INDIA	**March, 2017**
24.	Highly sensitive electrochemical detection of Emtricitabine in aqueous medium using LSV Balaji B. Mulik and **Bhaskar R. Sathe (Oral Presentation)**	National Conference on Frontiers in Chemical Sciences and Drug Development (NCFCSDD-2017)	**National**	Department of Chemistry, Dr. BA. Marathwada University, Aurangabad (MH)-431 004 (India)	**March, 2017**
25.	Electro-oxidation of Emtricitabine: Voltammetric Determination for its Analytical Applications to Pharmaceutical Dosage Balaji B. Mulik and **Bhaskar R. Sathe (Oral Presentation)**	International Conference on Advances in Chemical Sciences (ICACS 2018)	**International**	Department of Chemistry, Shivaji University, Kolhapur – 416004	**February, 2018.**
26.	Electrochemical Determination of Ethionamide from aqueous solution and Real Samples Using Metal Free Electrocatalyst, Balaji B. Mulik and	Conference on Electrochemistry in Advanced Materials, Corrosion and Radiopharmaceuticals. (CEAMCR 2018)	**International**	DAE Convention Centre, Anushakti Nagar, Bhabha Atomic Centre, Mumbai, India.	**February, 2018**

	Bhaskar R. Sathe (Oral Presentation)				
27.	Temperature dependent fabrication of cost-effective and nontoxic Cu_2ZnSnS_4 (CZTS) thin films for solar cell, Renuka V. Digraskar and **Bhaskar R. Sathe (Oral Presentation)**	International Conference on Condensed Matter and Applied Physics (ICC 2015)	**International**	Department of Physics Govt. Engineering college Bikaner	**October, 2015**
28.	Metal Free B- doped Graphene for Hydrogen Evolution Reactions, **Bhaskar R. Sathe (Oral Presentation)**	International Conference on Electrochemical Science and Technology 2014(ICONEST-2014	**International**	Indian Institute of Science, Bengaluru (KT) India	**August 2014**
29.	Synthesis of Rh-Carbon Nanospheres Hybrid Material for H_2 Generation **Bhaskar R. Sathe (Oral Presentation)**	International Conference on Nanoscience and Technology (ICONSAT-2012), Hyderabad, India	**International**	Indian Institute of Science and Technology (IICT) Hyderabad	**January 2012**
30.	Novel Optical Features and Kinetics of Morphological Evolution from Rh Nanostructures **Bhaskar R. Sathe (Oral Presentation)**	12th CRSI National Symposium in Chemistry, and 4th CSIR-RSC symposium in chemistry	**International**	Indian Institute of Science and Technology, and National Institute of Pharmaceucitical Education and Research (NIPER), Hyderabad, India	**Februar y 2010**
31.	Capping Induced Morphology Evolution of Rh Nanostructures and their Electrocatalytic Studies **Bhaskar R. Sathe (Oral Presentation)**	International workshop of Nanotechnology and Advanced Functional Materials,	**International**	National Chemical Laboratory Pune, India	**July 2009**
32.	Synthesis of Rh@MWNTs based Hetero-structures for Enhanced Field Emission Characteristics **Bhaskar R. Sathe (Oral Presentation)**	11th CRSI National Symposium in Chemistry, (CRSI-2009)	**International**	National Chemical Laboratory Pune, India	**Februar y 2009**
33.	Synthesis and Mechanistic Studies of Rh Nanostructures Using Galvanic Displacement Reaction **Bhaskar R. Sathe (Oral Presentation)**	International Conference on Advanced Materials, (ICAM-2008)	**International**	Mahatma Gandhi University, Kottayam, India	**Februar y 2008**
34.	Enhanced Electrocatalytic Performance of Rh Nano-Chains towards Formic Acid Oxidation **Bhaskar R. Sathe (Oral Presentation)**	9th CRSI National Symposium in Chemistry, (CRSI-2007)	**International**	Delhi University, Delhi, India	**Februar y 2007**
35.	Shape Selective Synthesis of Rhodium Nanostructures using CVD and Conductivity Studies	International Conference on Advanced Materials and Applications	**International**	Shivaji University, Kolhapur, India	**Novemb er 2007**

	Bhaskar R. Sathe (Oral Presentation)				
36.	Synthesis, Mechanism and Enhanced Field Emission from Hexagonal Rh Nanostructures **Bhaskar R. Sathe (Oral Presentation)**	International Conference on Nano-materials for electronics (ICNME-2006)	**International**	Center for Materials for Electronics Technology, Pune, India	**November 2006**
37.	Synthesis and Characterization of Monolayer Protected Rh Nanoparticles **Bhaskar R. Sathe (Oral Presentation)**	Indo-Australian Symposium on Nanoscience and Nanotechnology,	**International**	Indian Institute of Science, Bangalore, India	**March/ April 2006**
38.	Design and Development of Electrochemical Sensor for CO and SO_2 **Bhaskar R. Sathe (Oral Presentation)**	11th National seminar on physics and technology of Sensors (NSPTS)	**International**	University of Pune, India	**February/March 2006**

Attended Seminars, Conference, Symposia, Workshops

Sr. No.	Name of the Seminars, Conference, Symposia, Work-shops etc.	Name of the Agency	Date mm/yy
1.	Two Day Capacity Building Program on, "Building World Class Incubators"	Atal Innovation Mission, NITI Aayog at Gujarat Law Society, Ahmedabad, Gujarat (India)	**August 2018**
2.	One day author workshop on, "Scientific writing and publishing scholarly articles"	Knowledge Resource Centre (University Library), Dr. BA. Marathwada University, Aurangabad (MH)	**November 2017**
3.	International Conference on Advanced Rechargeable Batteries & Allied Materials ICARBM-2017	Centre for Materials for Electronics Technology (C-MET) Pune (MH), India	**March 2017**
4.	Training Programme on Awareness of "Scopus and Indian Citation Index"	Knowledge Resource Centre (University Library), Dr. BA. Marathwada University, Aurangabad (MH).	**December 2016**
5.	Oral presentation in Asian Consortium on computational materials science	SRM research institute and Department of Physics and Nanotechnology, SRM University, Chennai (TN).	**September 2016**
6.	National Conference on Ionic Liquids for Clean Energy and Environment (ILCEE 1015)	National Chemical Laboratory Pune (MH) India	**December 2015**
7.	One day Author workshop on, Scientific Writing and Publishing Scholarly Articles	Knowledge Resource Centre (University Library), Dr. BA. Marathwada University Aurangabad (MH) and Springer	**November 2015**
8.	One day awareness programme under UGC-Infonet digital library consortium	Knowledge Resource Centre (University Library), Dr. B. A. Marathwada University Aurangabad (MH) and INFLIBNET Centre, Gandhinagar	**October 2015**
9.	University-Industry Interaction Summit-2015	Dr. B. A. Marathwada University Aurangabad (MH)	**October 2015**
10.	One day acquaintance Programme-2015, Awareness about Facilities and Research Opportunities at inter university accelerator centre (IUAC) New Delhi	Department of Physics, Dr. B. A. Marathwada University, Aurangabad (MH)	**May 2015**

11.	One day State Level Conference on Examination Reforms: Challenges Ahead	Dr. B. A. Marathwada University, Aurangabad and Vidyapeeth Vikas Manch	**February 2015**
12.	Oral Presentation at International Conference on Electrochemical Science and Technology 2014(ICONEST-2014)	Indian Institute of Science, Bangalore, India	**August 2014**
13.	"Training Programme on Awareness of Scifinder Database"	Dr. B. A. Marathwada University Aurangabad	**July 2014**
14.	Right to Information (2005)	YESHADA Pune and Dr. BA. Marathwada University Aurangabad	**March 2012**
15.	Bilateral Indo-French International Symposium on Catalysis for Sustainable and Environmental Chemistry	National Chemical Laboratory Pune, India	**July 2010**
16.	Discussion Meeting on Chemical Reactions in Unusual Media	National Chemical Laboratory, Pune, India	**October 2009**
17.	Nano World-2008	Rotary Club of Pune Sinhagad Road and National Chemical Laboratory Pune, India	**August 2008**
18.	2nd SERC Summer School in Solid State and Materials Chemistry	Indian Institute of Science, Bangalore, India	**June/July 2007**
19.	National Seminar on disaster management and safety awareness in chemical laboratories	Department of chemistry, Dr. BA. Marathwada University, Aurangabad	**January 2002**

Organizing Member:

1. Nominated as a member of departmental committee of RUSA-center for Advanced Sensor Technology for the period of two years **(2019-2017 and 2020-2021).**

2. Nominated as a member of departmental committee of Central Facility Center for Advanced Research for a period of the period of two years **(2017-2018 and 2018-19).**

3. Member of Five-Year Prospective Plan (2018-19 to 2023-24), Dr. BA Marathwada University, Aurangabad, India **(July 2018).**

4. Nomination as a member secretory of Academic and Administrative Audits **(AAA-2018),** Dr. BA Marathwada University, Aurangabad, India **(May 2018).**

5. Member, **Avishkar Cell 2017**, Dr. BA Marathwada University, Aurangabad, India **(December 2017).**

6. National Seminar on "Frontiers in Chemical Sciences and Drug Development" (NCFCSDD-2017) Department of Chemistry, Dr. BA Marathwada University, Aurangabad, India **(March 2017).**

7. University Level National Science Day Celebration -2017, Organizing Member, Dr. BA Marathwada University, Aurangabad, India **(February 2017).**

8. Member, Avishkar Cell-2016, Dr. BA Marathwada University, Aurangabad, India **(December 2016).**

9. Organizing member and Aurangabad District coordinator for University Level Avishkar-2016 (ULA-2016), Organized by Dr. BA Marathwada University, Aurangabad, India **(December 2016).**

10. University Level National Science Day Celebration-2016, Organizing Member, Dr. BA Marathwada University, Aurangabad, India **(February 2016).**

11. University Level Avishkar-2014 (**ULA-2015**), Organized by Dr. BA Marathwada University, Aurangabad, India **(November 2015).**

12. Organizing Committee member for National Conference on Recent Challenges in Advanced Material and Green Chemistry by Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Sub-Campus, Osmanabad, India **(December 2015).**

13. Advisory committee member for National Seminar on Emerging Trends and Challenges in Chemical Sciences by Arts, Commerce and Science College, Kille Dharur, Beed, India **(January 2015).**

14. Science Academies Lecture Workshop on "Advances in Chemical Sciences" Department of Chemistry, Dr. BA Marathwada University, Aurangabad, India, and Indian Academy of Sciences Bangalore, India **(April 2014).**

15. University Level Avishkar-2014 (**ULA-2014**), Organized by Dr. BA Marathwada University, Aurangabad, India **(November 2014).**
16. Pre-Science Congress**-2014** Conference on, "Science and Technology for Human Development", Organized by ISCA Aurangabad Chapter Dr. BA Marathwada University, Aurangabad, India **(December 2014).**

17. National workshop on Nanotechnology and Intellectual Property Rights and Patents in Science and Technology from Nanotechnology Perspectives, organized by department of Nanotechnology, Dr. BA Marathwada University Aurangabad, India **(February 2012).**

18. National Seminar on "Advances in Materials Chemistry" (AIMS-2011) Department of Chemistry, Dr. BA Marathwada University, Aurangabad, India **(March 2011).**

19. DST-INSPIRE Entership Camp**-2011**, Dr. BA Marathwada University, Aurangabad, India **(August 2011).**

20. Science Academies Lecture Workshop on "Probing Electronic States in Molecules and Molecular Materials" Department of Chemistry, Dr. BA Marathwada University, Aurangabad, India and Indian Academy of Sciences Bangalore, India (**October 2010).**

21. National Seminar on "Biocatalysis and Biomimetic Catalysis in Organic Synthesis (NSBBOS-2009)" Department of Chemistry, Dr. BA Marathwada University, Aurangabad, India **(March 2009).**

Co-Curricular Activities

1. Committee member for Yuvak Mahotsav**-2018**; Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
2. Member Secretory: On the spot Inspection to assess status of implementation of development of sports infrastructure and equipment in colleges -XI and XII plan of UGC: **July 2018.**
3. Contingent Incharge in 10th Maharashtra State Inter-University Research Convention "**Avishkar 2015**" organized by Savitribai Phule Pune University, Pune; **January 2016.**

4. Director of University PG CAS (Science) **Oct/Nov 2013-2014** held at Rajashri Shahu Maharaj Pariksha Bhavan, Dr. BA Marathwada University Aurangabad.
5. Served as Joint Chief Superintendent in PhD Entrance Test **(PET-2014),** Dr. BA Marathwada University Aurangabad.
6. Director of University PG-CAS (Science) April/May **2013-2014** held at Rajashri Shahu Maharaj Pariksha Bhavan, Dr. BA Marathwada University Aurangabad.
7. Serving as examiner for General Chemistry, Physical Chemistry, Analytical Chemistry and Nanoscience of Dr. BA Marathwada University Aurangabad and other university since **2008.**
8. Serving as subject expert in the field of Material Science, Nanoscience and Chemistry for Ph.D. thesis evaluation for state and national universities since **2008.**
9. Serving as Resource Person to encourage academic activities in various affiliated colleges of university since **2008.**
10. Designed syllabus for the Department of Chemistry and Analytical Chemistry, Dr. BA Marathwada University Aurangabad.
11. Committee Member for Maharashtra State Inter University Krida Mahotsav-**2014** organized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
12. Organizing Member for University-Industry Interaction Summit-**2015**: Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
13. Committee member for Yuvak Mahotsav-**2013**; Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

References:

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Professor Bharat. B. Kale Scientist-G, Director & DG(A) Centre For Materials for Electronics Technology (C-MET), Govt of India Panchawati off Pashan Road, Pune-411008 Phone: 091 20 25865273 /25878141 **Email:** bbkale1@gmail.com bbkale@cmet.gov.in	**Professor Sourav Pal** FNA, FASC, FNASc, FRSC Director and Professor, Indian Institute of Science Education and Research (IISER) Kolkata, Mohanpur 741246, Nadia, West Bengal **Email:** s.pal@iiserkol.ac.in	**Professor Satish A. Patil** Professor and Chair Solid State and Structural Chemistry Unit; Indian Institute of Science, Bangalore (India) **Email:** spatil@iisc.ac.in Tel. 080-22932651, Fax: +91 80 23601310

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