


Name of Faculty	Dr. Marepally Bhanu Chandra		
Designation	Assistant Professor		
Nature of Job/Appointment	Regular		
Date of Joining	01-12-21		
E-mail	bhanuchandram_ece@cbit.ac.in		
Education Qualifications	Name of the Degree	Class	
Ph.D.	Erasmus Joint Doctorate (Nano Technology) 1) University of Claude Bernard, Lyon, France 2) University of Messina, Italy	Awarded (Full Time - Erasmus Mundus)	
PG	M. Tech (Nano Technology) Vellore Institute of Technology, Tamil Nadu, India.	Distinction (Gold Medallist)	
UG	B. Tech (ECE) International Institute of Information Technology, IIIT-Hyderabad, Telangana, India.	First	
Work Experience			
Teaching	3.5 Years		
Research	3.5 Years (JRF and PhD)		
Industry	1.5 Years		
Others	Scientific Consultant with STRL Bio systems		
Area of Specialization	Nano Technology, Solar Cells & Fuels and Photonics.		
Academic Identity	Scopus ID: 56940935700 Researcher ID: C-5755-2018 Orcid ID: 0000-0001-5836-856X		
Professional Memberships			
Responsibilities held at Institution Level	i. Associate Dean, R&D, K L University, Hyderabad (KLH) ii. Erasmus Mundus Assembly, Program Representative, Italy		
Responsibilities held at Department Level	Research Progress Assessment Committee (RPAC) member, KLH		
Research Guidance	Ongoing at KLH – PhDs: 5 i. 2 Full Time (1 DST SERB JRF and 1 Internal KLEF) ii. 3 Part Time (KLEF) i. <i>STRL BIO Systems – Consultancy Grant – 2021.</i> (3 Lakhs) ii. <i>DST SERB – Core Research Grant, India – 2019.</i> (56 Lakhs) iii. <i>Start-Up India competition, India, Awarded in Top-200 – 2019.</i> iv. <i>Erasmus Mundus Fellowship-Joint PhD on Sustainable Industrial Chemistry (SINCHEM) – 2013.</i> (75 Lakhs) v. <i>High Distinction certification on Fundamentals of Nano-Electronics by NanoHub, 'Purdue University' – 2012.</i> vi. <i>CSIR NET'12 - Junior Research Fellowship in Physics (Rank - 100) and GATE'13 (Rank - 257) – 2012.</i> vii. <i>GOLD medallist and member of the Honor's club for M. Tech Nanotechnology. (2011-13)</i> viii. <i>Gate Fellowship from DST, India in Nano Tech. (2011-13)</i> ix. <i>Mr. Susee Soundararajan Endowment Award and Meritorious scholarship at VIT University. (2011-13)</i> x. <i>AIEEE - AIR 759 and state rank 259 - 2005.</i> xi. <i>IIT-JEE – AIR 900 in Screening and AIR 3100 in Mains - 2005.</i> xii. <i>National Science Olympiad - Ranked 1st in Hyderabad and AIR 97th - 2004.</i> xiii. <i>Mathematics and Chemistry Olympiad - selected for state 2003.</i>		
Awards Received			
Courses Handled at Under Graduate / Post Graduate Level.	Electromagnetics and Transmission Lines and Applications, Electrical Circuit Theory, Analog Electronics and Circuit Design, Electronics system design, Solar Photovoltaic Cells and Power arrays.		
No. of Papers Published	National Journals – -- National Conference – --	International Journals – 07 International Conference – 05	

Projects Carried out	<ul style="list-style-type: none"> i. <i>Principal Investigator</i>: DST SERB – Core Research Grant – 56.3 Lakhs Title: Development of Nanofoam based Plasmonic structures towards Photo-Electro-Chemical Water-Splitting and CO₂ reduction. ii. <i>Principal Investigator</i>: STRL BIO Systems, Consultancy – 3 Lakhs Title: Nano-UV based Air Filtration and Bio-Sterilization devices
Patents	Negative Ion Based Continuous Disinfection System, 202141019111, 2021 (filed)
Technology Transfer	----
Invited Speaker (Reviewer)	3 rd SINCEM Winter School, Bologna, Italy - 2016 (Speaker) <i>Topic: Production of Solar Fuels using CO₂</i>
No. of Books/Chapter Published with details	<ul style="list-style-type: none"> i. Book Chapter: Production of Solar Fuels using CO₂, Studies in Surface Science and Catalysis, Elsevier, 9780444641274, 2019. i. Training program on “Prospects for Start-ups in Solar Energy Technologies”, National Institute of Solar Energy (NISE), India – 2020. ii. National Seminar on “Bio Signal Processing for Health Care Applications”, Dec. 17-19, 2019. iii. The AI & ML – FDP by NIT Warangal, KLEF, Hyderabad, India - 2018. iv. The EPICS – Annual Symposium conducted by Purdue University, Hyderabad, India - 2018. v. The I SINCEM Autumn School on the Green physical chemistry, Montpellier, France - 2016. vi. The Ecole de Catalyse - ELITECAT, Lyon, France - 2015. vii. The Biotic CO₂ Workshop and SCOT Workshop, Lyon France - 2014. viii. The Latest Developments in Solar Photovoltaic Technology - Seminar, P.S.G. Institute of Advanced Studies, Coimbatore, India - 2013.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (**Attended and/or Organized**).

Details of Journal Publications/Conferences

Marepally, B.C., Ampelli, C., Genovese, C., Sayah, R. Veyre, L., Dalverny, C., Thieuleux, C., Quadrelli, E.A., Perathoner, S., & Centi, G. “Supported metallic nanoparticles prepared by an organometallic route to boost the electrocatalytic conversion of CO₂.” Journal of CO₂ Utilization, Vol. 50, pp. 101613, (2021). (IF – 7.132)

Venumbaka, M. R., Akkala, N., Duraisamy, S., Saravanan, S., Poola, P. K., Rao, D. S., Shrivatsava, A. K., **Marepally, B.C.***, “Performance of TiO₂, Cu-TiO₂, and N-TiO₂ nanoparticles Sensitization with Natural Dyes for Dye Sensitized Solar Cells.” Materials Today: Proceedings, (2021) – (under Production).

Venumbaka, M.R., Raina, J.P.(Late), **Marepally, B.C.***, “Plasmonic E-field Enhancements and Coupling Effects of Metallic Structures using FDTD.” Materials Today: Proceedings, Vol. 47(9), (2021).

Marepally, B.C., Ampelli, C., Genovese, C., Tavella, F. Quadrelli, E.A., Perathoner, S., & Centi, G. “Area Optimization of CMOS Full Adder Design Using 3T XOR.” WiSPNET, IEEE, 192-194, (2020).

Marepally, B.C., Ampelli, C., Genovese, C., Tavella, F. Quadrelli, E.A., Perathoner, S., & Centi, G. “Electrocatalytic reduction of CO₂ over dendritic-type Cu- and Fe-based electrodes prepared by electrodeposition.” Journal of CO₂ Utilization, Vol. 35, pp. 194-204, (2020). (IF – 7.132 ; citations – 9)

Saboo, T., Tavella, F., Ampelli, C., Perathoner, S., Genovese, C., **Marepally, B.C.**, Veyre, L., Quadrelli, E.A., & Centi, G. “Water splitting on 3D-type meso/macro porous structured photoanodes based on Ti mesh.” Solar Energy Materials and Solar Cells, Vol. 178, pp. 98-105, (2018). (IF – 7.267 ; citations – 20)

Marepally, B.C., Ampelli, C., Genovese, C., Saboo, T., Perathoner, S., Wisser, F.M., Veyre, L., Canivet, J., Quadrelli, E.A., & Centi, G. “Enhanced formation of >C 1 products in the electroreduction of CO₂ by adding a carbon dioxide adsorption component to a gas diffusion layer type catalytic electrode.” ChemSusChem, Vol. 10, pp. 4442-4446, (2017). (IF – 8.928 ; citations – 37)

Marepally, B.C., Ampelli, C., Genovese, C., Tavella, F., Veyre, L., Quadrelli, E.A., Perathoner, S., Centi, G. “Ultrafine Cu nanoparticles onto nanocarbon-based electrodes for the electrocatalytic reduction of CO₂.” Journal of CO₂ Utilization, Vol. 21, pp. 534-542, (2017). (IF – 7.132 ; citations – 35)

Ampelli, C., Genovese, C., **Marepally, B. C.**, Papanikolaou, G., Perathoner, S., & Centi, G. “Electrocatalytic conversion of CO₂ to produce solar fuels in electrolyte or electrolyte-less configurations of PEC cells.” Faraday Discussions, Vol. 183, pp. 125-145, (2015). (IF – 3.427 ; citations – 43)

Genovese, C., Ampelli, C., **Marepally, B.C.**, Papanikolaou, G., Perathoner, S., Centi, G. “Electrocatalytic reduction of CO₂ for the production of fuels: a comparison between liquid and gas phase conditions.” Chemical Engineering Transactions, Vol. 43, pp. 2281-2286, (2015). (citations – 12)

Sarkar, Paramita; Parameswaran, Chithra; Harish, C.; **Chandra, M. Bhanu**; Grace, A. Nirmala. “Kinetics of silver nanoparticle growth using DMF as reductant – Effect of surfactants.” Advanced Materials Research, Vol. 938, pp. 30-35, (2014). (citations – 8)

Saranya, M.; Garg, Srishti; Singh, Iksha; Ramachandran, R.; Santhosh, C.; Harish, C.; Vanchinathan, T. Mudaliar; **Chandra, M. Bhanu**; Grace, A. Nirmala. “Solvothermal Preparation of ZnO/Graphene Nanocomposites and its photocatalytic properties.” Nanoscience and Nanotechnology Letters, Vol. 5(3), pp. 349-354, (2013). (IF – 1.889 ; citations – 20)