

Research Outputs (Publications)

A. Research (SCI) Publication

- ❖ **R.B. Choudhary**, S. Ansari and M. Majumder “Recent advances on redox active composites of metal-organic framework and conducting polymers as pseudocapacitor electrode material” (SCI) *Renewable & Sustainable Energy Review*, Vol. 145 (2021) 110854 ([Imp. Factor~12.110](#))
- ❖ R. Singh and **R.B. Choudhary**, “Ag/ AgCl sensitized n-type ZnO and p-type PANI composite as an active layer for hybrid solar cell application.” *Optik-Int. J. Light & Electron Optics*, Vol.225 (2021) 165766 ([Imp. Factor ~2.187](#))
- ❖ **R.B. Choudhary** and D. Nayak “Tailoring the properties of 2D rGO-PPy-ZnS nanocomposite as emissive layer for OLEDs.” *Optik-Inter. J. Light and Electron Optics Elsevier (SCI)* Vol. 23 (2021) 166336 ([Imp. Factor~2.187](#)).
- ❖ A. Verma and **R.B. Choudhary**, “Influence of CdS nanorods on the optoelectronic properties of 2-dimensional rGO decorated polyindole matrix.” *Materials Science in Semiconductor Processing*, Elsevier (SCI) Vol. 110 (2020) 104948 ([Imp. Factor ~3.085](#))
- ❖ A. Verma and **R.B. Choudhary**, “Structural analysis and augmented optoelectronic performance of PIN/PPY/CdS nanohybrid” *J.f Inorganic and Organometallic Polymers and Materials*, Springer (SCI) Vol. 30 (2020) 2683 ([Imp. Factor ~1.941](#))
- ❖ M. Majumder, **R.B. Choudhary**, A.K. Thakur, A. Khodayari, M. Amiri, R. Boukherroub and S. Szunerits, “Aluminum based metal-organic framework integrated with reduced graphene oxide for improved supercapacitive performance” *Electrochimica Acta*, Elsevier (SCI) Vol. 353 (2020) 136609 ([Imp. Factor ~ 6.215](#))
- ❖ **R.B. Choudhary**, S. Ansari and B. Purty, “Robust electrochemical performance of polypyrrole (PPy) and Polyindole (PIn) based hybrid electrode materials for supercapacitor application: A review” *J. Energy Storage*, Elsevier (SCI) Vol. 29 (2020) 101302 ([Imp. Factor ~ 3.762](#))
- ❖ **R.B. Choudhary** and G. Mandal, “MoS₂ decorated with graphene and polyaniline (PANI) nanocomposites as an ETL for OLED applications” *J. Materials Science: Materials in Electronics*, Springer (SCI) Vol. 31 (2019) 1302 ([Imp. Factor ~ 2.220](#))
- ❖ **R.B. Choudhary** and B. Purty, “Integrating porous ZnS/rGO/PIn nanohybrid as binder free supercapacitive electrode material with extended cell potential and inflated energy density” *J. Solid State Chemistry*, Elsevier (SCI) Vol. 180 (2019) 120977 ([Imp. Factor ~2.726](#)).
- ❖ **R.B. Choudhary** and A. Verma, “Augmented structural, optical and electrical properties of CdS decorated PANI/ rGO nanohybrids” *J. Optical Materials*, Elsevier (SCI) Vol. 96 (2019) 109310 ([Imp. Factor ~2.779](#)).
- ❖ M. Majumder, **R.B. Choudhary** and A.K. Thakur, “Hemispherical N-doped carbon sphere integrated with polyindole (PIN) as higher performance electrode material for supercapacitor applications.” *Carbon*, Elsevier (SCI), Vol. 142 (2019) 650 ([Imp. Factor ~ 8.821](#)).

- ❖ R. Singh and **R.B. Choudhary**, and R. Kandulna, "Optical band gap tuning and thermal Properties of PMMA/ ZnO sensitized polymers for efficient exciton generation in solar cell application" *J. Material Science in Semiconductor Processing*, Elsevier (SCI) Vol. 103 (2019) 104623 ([Imp. Factor ~3.085](#)).
- ❖ **R.B. Choudhary** and R. Kandulna, "2-Dimensional rGO impregnated circular-tetragonal-bi-pyramidal structure of PPY-TiO₂-rGO nanocomposite as ETL for OLED and supercapacitor electrode materials." *J. Material Science in Semiconductor Processing*, Elsevier (SCI) Vol.94 (2019) 86 ([Imp. Factor ~3.085](#)).
- ❖ D. Nayak and **R.B. Choudhary**, "Augmented optical and electrical properties of PMMA-ZnS nanocomposites as the emissive layer for OLEDs' applications." *J. Optical Materials*, Elsevier (SCI) Vol. 91 (2019) 470 ([Imp. Factor ~2.779](#)).
- ❖ B. Purty and **R.B. Choudhary**, "Temperature dependent supercapacitive performance of NH₃ modified TiO₂ decorated PPY nanohybrids in various electrolyte systems" *J. Synthetic Metals*, Elsevier (SCI) Vol. 249 (2019) 113 ([Imp. Factor ~3.286](#)).
- ❖ **R.B. Choudhary**, M. Majunder and A.K. Thakur, "2D exfoliated molybdenum disulphide Flakes integrated with polyindole (PIN) for supercapacitor application." *J. Chemistry Select*, Wiley (SCI) Vol. 4 (2019) 6906 ([Imp. Factor ~1.811](#)).
- ❖ G. Mandal and **R.B. Choudhary**, "rGO-Y₂O₃ intercalated PANI matrix (PANI-rGO-Y₂O₃) based polymeric nanohybrid material as electron transport layer for OLED applications." *J. Research on Chemical Intermediate*, Springer (SCI) Vol. 45 (2019) 3755 ([Imp. Factor ~2.262](#)).
- ❖ R. Singh and **R.B. Choudhary**, "Robust optical and electrical properties of TiO₂-sensitized polymeric (PANI-TiO₂) nanocomposites for the hybrid solar cell applications." *Bulletin of Materials Science*, Springer (SCI) Vol. 42 (2019) 202 ([Imp. Factor ~1.392](#)).
- ❖ R. Kandulna and **R.B. Choudhary**, "Free exciton absorptions and the quasi-reversible redox actions in polypyrrole-polyaniline-zinc oxide nanocomposites as electron transporting layer for organic light emitting diode and electrode material for supercapacitors." *J. Inorganic and Organometallic Polymers and Materials*, Springer (SCI) Vol. 29 (2019) 730 ([Imp. Factor ~1.941](#)).
- ❖ A. Verma and **R.B. Choudhary**, "Mixed morphology and inflated electron-hole recombination rate and augmented optical absorbance capacity of PANI-PPY-CdS." *J. Inorganic and Organometallic Polymers and Materials*, Springer (SCI) Vol. 29 (2019) 444 ([Imp. Factor ~1.941](#)).
- ❖ A.K. Thakur, M. Majunder and **R.B. Choudhary**, "MoS₂ flakes integrated with B and N-doped Carbon: Striking gravimetric and volumetric capacitive performance for supercapacitors" *J. Power Sources*, Elsevier (SCI) Vol. 402 (2018) 163 ([Imp. Factor ~8.247](#)).
- ❖ M. Majunder, **R.B. Choudhary** and A.K. Thakur, "RE₂O₃ metal oxide incorporated polyindole composites: gravimetric and volumetric capacitive performance for supercapacitor applications" *New J. Chemistry*, RSC (SCI) Vol.42 (2018)5295 ([Imp. Factor ~3.288](#)).

- ❖ A.K. Thakur, **R.B. Choudhary** and M. Majumder, “Fairly improved pseudocapacitance of the PTP/ PANI/ TiO₂ nanohybrid electrode materials for the supercapacitor applications.” *Ionics*, Springer (SCI) Vol. 24 (2018) 257 ([Imp. Factor ~2.394](#)).
- ❖ R. Kandulna, **R.B. Choudhary** and R. Singh, “PMMA-TiO₂ based polymeric nanocomposite materials as electron transport layer for organic light emitting diode application.” *Journal of Materials Science: Materials in Electronics*, Springer (SCI) Vol. 29 (2018) 5893 ([Imp. Factor ~2.220](#)).
- ❖ B. Purty, **R.B. Choudhary** and A. Biswas, “Potentially enlarged supercapacitive values for the CdS/ PPY decorated rGO nanocomposites as electrode materials.” *J. Materials Chemistry and Physics*, Elsevier (SCI) Vol. 216 (2018) 213 ([Imp. Factor ~3.408](#)).
- ❖ R. Singh, **R.B. Choudhary**, and R. Kandulna, “Delocalization of π -electrons and the trapping action of ZnO nanoparticles in PPY matrix for hybrid solar cell application.” *J. Molecular Structure*, Elsevier (SCI) Vol.1156 (2018) 633 ([Imp. Factor ~2.463](#)).
- ❖ P. Maji, **R.B. Choudhary** and M. Majhi, “Polymeric phase change nanocomposites (PMMA/ Fe:ZnO) for the electronic packaging applications.” *Applied Physics-A, J. Materials Science & Processing*, Springer (SCI) Vol.124 (2018) 70 ([Imp. Factor ~1.810](#)).
- ❖ R. Kandulna and **R.B. Choudhary**, “Concentration dependent behaviours of ZnO reinforced PVA-ZnO nanocomposites as electron transport layer materials for OLED.” *J. Polymer Bulletin*, Springer (SCI) Vol. 75 (2018) 3089 ([Imp. Factor ~2.014](#)).
- ❖ M. Majhi, **R.B. Choudhary** and A.K. Thakur, “CoCl₂-doped PANI composites as the electrode materials with enhanced electrochemical performance for supercapacitor application.” *J. Polymer Bulletin*, Springer (SCI) Vol. 75 (2018) 1563 ([Imp. Factor ~2.014](#)).
- ❖ B. Purty, **R.B. Choudhary** and A. Biswas “Augmented optical, dielectric and EC performance for the morphologically crushed nanorods decorated Fe:MnO₂/PIN nanocomposite.” *Optik-Int. J. Light and Electron Optics*, Elsevier (SCI) Vol.158 (2018) 767 ([Imp. Factor ~2.187](#)).
- ❖ B. Purty, **R.B. Choudhary** and A. Biswas, “Chemically grown mesoporous f-CNT/ α -MnO₂/ PIn nanocomposite as electrode materials for supercapacitor applications” *J. Polymer Bulletin*, Springer (SCI) Vol. 76 (2019) 1619 ([Imp. Factor ~2.014](#)).
- ❖ K. Thakur and **R.B. Choudhary**, M. Majumder, “In-situ integration of the waste coconut shell derived activated carbon/ PPY/ rare earth metal oxide for ultrahigh vol. capacitance.” *J. Electrochimica Acta*, Vol. 251 (2017) 532 Elsevier (SCI) ([Imp. Factor ~6.215](#)).
- ❖ M. Majumder, **R.B. Choudhary** and A.K. Thakur, “Gravimetric and volumetric capacitive performance of PIN/ CB/ MoS₂ hybrid electrode material for supercapacitor applications.” *J. Electrochimica Acta*, Elsevier (SCI) Vol. 248 (2017) 98 ([Imp. Factor ~6.215](#)).
- ❖ A.K. Thakur, **R.B. Choudhary** and M. V. Shelke, “Facile synthesis and electrochemical evaluation of the PANI/ CNT/ MoS₂ composite electrode material for high performance supercapacitors.” *J. Material Science & Engineering-B*, Elsevier (SCI) Vol. 223 (2017) 24 ([Imp. Factor ~4.706](#)).

- ❖ M. Majumder, **R.B. Choudhary** and A.K. Thakur, “Augmented gravimetric and volumetric capacitive performance of the rare earth metal oxide incorporated PPY for the supercapacitor applications.” *J. Electroanalytical Chemistry*, Elsevier (SCI) Vol. 804 (2017) 42 ([Imp. Factor ~3.807](#)).
- ❖ M. Majumder, **R.B. Choudhary** and A.K. Thakur, “Impact of rare-earth metal oxide (Eu_2O_3) on electrochemical properties of PPY/ CuO composite for supercapacitor application.” *J. RSC Advances*, RSC (SCI) Vol. 7 (2017) 37 ([Imp. Factor ~3.119](#)).
- ❖ P. Maji, **R.B. Choudhary** and M. Majhi, “Structural, electrical and optical properties of the silane-modified ZnO reinforced PMMA matrix and its catalytic activities.” *J. Non-Crystalline Solids*, Elsevier (SCI) Vol. 456 (2017) 40 ([Imp. Factor ~2.929](#)).
- ❖ P. Maji and **R.B. Choudhary**, “Facile synthesis, dielectric properties and electro-catalytic activities of PMMA- NiFe_2O_4 based polymeric nanocomposite.” *J. Materials Chemistry and Physics*, Elsevier (SCI) Vol. 193 (2017) 391 ([Imp. Factor ~3.408](#)).
- ❖ M. Majhi, **R.B. Choudhary** and P. Maji, “ TiO_2 reinforced polymeric nanocomposites of the HCl-doped polyaniline (PANI) and their conductive properties.” *J. Polymer Composites*, Wiley (SCI) Vol. 38 (2017) 108 ([Imp. Factor ~2.265](#)).
- ❖ R. Kandulna, **R.B. Choudhary** and P.Maji, “Ag-doped ZnO reinforced polymeric Ag:ZnO/ PMMA nanocomposites electron transporting layer for OLED application” *J. Inorganic and Organometallic Polymers & Materials*, Springer (SCI) Vol. 27 (2017) 1760 ([Imp. Factor ~1.941](#)).
- ❖ R. Kandulna and **R.B. Choudhary**, “Robust electron transport properties of PANI/ PPY/ ZnO polymeric nanocomposites for OLED applications.” *Optik – Int. J. Light and Electron Optics*, Elsevier (SCI) Vol. 144 (2017) 40 ([Imp. Factor ~2.187](#)).
- ❖ M. Majhi, **R.B. Choudhary** and A.K. Thakur, “HCl protonated polymeric PANI - ZnS nanocomposites and measurement of robust dielectric, optical and thermal performance.” *Optik–Int. J. Light & Electron Optics*, Elsevier (SCI) Vol.136 (2017) 181 ([Imp. Factor ~2.187](#)).
- ❖ A.K. Thakur, **R.B. Choudhary** and M. Majumder, “Enhanced electrochemical performance of PPY coated MoS_2 nanocomposites as the electrode materials for supercapacitor application.” *J. Electroanalytical Chemistry*, Elsevier (SCI) Vol. 782 (2016) 278 ([Imp. Factor ~3.807](#)).
- ❖ A.K. Thakur and **R.B. Choudhary**, “High-performance supercapacitors based on the polymeric Binary composites of Polythiophene-titanium dioxide” *Synthetic Metal*, Elsevier (SCI) Vol. 220 (2016) 25 ([Imp. Factor ~3.286](#)).
- ❖ P. Maji, **R.B. Choudhary** and M. Majhi, “Structural, optical and dielectric properties of ZrO_2 reinforced polymeric nanocomposite films of PMMA” *Optik– Int. J. Light and Electron Optics*, Elsevier (SCI) Vol. 127 (2016) 4848 ([Imp. Factor ~2.187](#)).
- ❖ R. Singh and **R.B. Choudhary**, “Optical absorbance and ohmicbehaviour of PANI and PANI/ ZnO nanocomposites for solar cell applications, ”*Optik–Int. J. Light and Electron Optics*, Elsevier (SCI)Vol.127 (2016) 11398 ([Imp. Factor ~ 2.187](#)).

- ❖ M. Majhi, **R.B. Choudhary** and P. Maji, “CoCl₂ reinforced polymeric nano- composites of the conjugated polyaniline and their conductive properties.” *Bulletin of Materials Science*, IAS (SCI) Vol. 38 (2015) 1195 ([Imp. Factor ~1.392](#)).
- ❖ P. Maji, **R.B. Choudhary** and P.P. Pande, “Effect of Zn(NO₃)₂ filler on dielectric permittivity and the electrical modulus of the polymethyl methacralate (PMMA)”*Bulletin of Materials Science*, IAS (SCI) Vol. 38 (2015) 417 ([Imp. Factor ~1.392](#)).
- ❖ S. Swain, **R.B. Choudhary** and P. Kumar, “Electrical and ferroelectric studies of 2-layered SrBi₂Ta₂O₉ based ceramics.” *Physica-B, Condensed matter*, Elsevier (SCI) Vol. 477 (2015) 56 477 (2015) 56 ([Imp. Factor ~1.902](#)).
- ❖ **R.B. Choudhary**, O.N. Anand and O.S. Tyagi, “FTIR micro-reflectance absorption spectro scopic analysis of the chemisorbed reaction films for tribological application” *Lubrication Science*, Wiley (SCI) Vol. 27 (2015) 381 ([Imp. Factor ~1.812](#)).
- ❖ **R.B. Choudhary**, O.N. Anand, and O.S. Tyagi, “Surface reactivity and layer analysis of chemisorbed reaction films in the surface-chemical environment of alkyl octadecenoates.”*J. Chemical Sciences*, IAS (SCI) Vol. 121 (2009) 353 ([Imp. Factor ~1.406](#)).
- ❖ V.K. Chibber, **R.B. Choudhary**, O.S. Tyagi and O.N. Anand, “Antiwear and antifricion characteristics of tribochemical films from alkyl octadecenoates and their derivatives.” *Lubrication Science*, Wiley (SCI) Vol. 18(2006) ([Imp. Factor ~1.812](#)).
- ❖ **R.B. Choudhary**, A.K. Jana and M.K. Jha, “Enzyme technology applications in leather processing.” *Indian Journal of Chemical technology*, NISCAIR (SCI) Vol. 11 (2004) 659 ([Imp. Factor ~0.475](#)).
- ❖ **R.B. Choudhary** and M.K. Jha, “Action mechanisms of boundary lubrication additives: a review, *Part-II*.” *Lubrication Science*, Wiley (SCI) Vol. 17 (2004) 75 ([Imp. Factor ~1.812](#)).
- ❖ **R.B. Choudhary** and M.K. Jha, “Action mechanisms of boundary lubrication additives: a review, *Part-I*.” *Lubrication Science*, Wiley (SCI) Vol. 16 (2004) 405 ([Imp. Factor ~1.812](#)).
- ❖ **R.B. Choudhary** and P.P. Pande, “Lubrication potential of boron compounds: An Overview.” *Lubrication Science*, Wiley (SCI) Vol.14 (2002) 211 ([Imp. Factor ~1.812](#)).
- ❖ **R.B. Choudhary** and P.P. Pande, “Alternative solvent systems for iodine value determination.”*Indian Journal of Chemical Technology*, NISCAIR (SCI) Vol. 7 (2000) 165 ([Imp. Factor ~0.475](#)).

B. Industrial Technical (Non-SCI) Articles

- ❖ **R.B. Choudhary**, R. Kandulna, M. Majumder and G. Mandal, “Electronics with plastics, foils and fabrics: Ensuing flexible electronics.” *Crimson Publisher New York USA*, August 2018.
- ❖ P. Maji, **R.B. Choudhary** and M. Majhi, “Improved electrical and optical properties of PMMA nanocomposite.” *Plastic Research (SPE)* DOI:10.2417/spepro.006492.

- ❖ **R.B. Choudhary**, “Hydrogen fuel: The fair fuel for future energy” *Chemical Business*, Vol. 19, No. 1 (2005) 39.
- ❖ **R.B. Choudhary**, “Energy starvation in India–An Energy Survey” *Chemical Business*, Vol. 19, No. 11 (2006) 36.
- ❖ **R.B. Choudhary**, “Configuration of functional groups and the functionality at applied surfaces” *Chemical Business*, Vol. 20, No. 3 (2007) 35.
- ❖ **R.B. Choudhary**, “Functionalized materials for advanced technologies” *Chemical Business*, Vol. 20, No. 4 (2007) 41.
- ❖ **R.B. Choudhary**, “Lateral configuration of nanotechnology for solid phase nanomaterials” *Chemical Business*, Vol. 20, No. 11 (2006) 33.
- ❖ **R.B. Choudhary**, “The ultimate evolution of atomic scale technology-The nanotechnology” *Chemical Business*, Vol. 21, No. 2 (2007) 28.
- ❖ **R.B. Choudhary**, “Functional behaviour and chemical nature of organic sulfides” *Chemical Business*, Vol. 21, No. 3 (2007) 35.
- ❖ **R.B. Choudhary**, “Tangible approach to the chemical functions for organic sulfides and mercaptides” *Chemical Business*, Vol. 21, No. 4 (2007) 30.
- ❖ **R.B. Choudhary**, “Chemical concepts in functional materials and nanotechnology” *Chemical Business*, Vol. 21, No. 5 (2007) 37.
- ❖ **R.B. Choudhary**, “Micro-mechanism for surface modification and investigations of applied surfaces” *Chemical Business*, Vol. 21, No. 6 (2007) 39.
- ❖ **R.B. Choudhary**, “Electrochemical materials for high precision fabrication of solid oxide Fuel cells” *Chemical Business*, Vol. 21, No. 7 (2007) 23.
- ❖ **R.B. Choudhary**, “Techno-economic compatibility of the elemental iron and iron specialties” *Chemical Business*, Vol. 21, No. 8 (2007) 20.
- ❖ **R.B. Choudhary**, “Entrepreneurial resurgence of powder metallurgy and iron nano particles” *Chemical Business*, Vol. 21, No. 9 (2007) 24.
- ❖ **R.B. Choudhary**, “Modification efficiency of surface coating materials and their industrial application” *Chemical Business*, Vol. 21, No. 11 (2007) 13.
- ❖ **R.B. Choudhary**, “Global perspective and commercial glitter of an agronomical ingredient” *Chemical Business*, Vol. 21, No. 12 (2007) 25.
- ❖ **R.B. Choudhary**, “Hierarchical investigations of minerals/comp. for nano bones and nano collagens” *Chemical Business*, Vol. 22, No. 1 (2008) 39.
- ❖ **R.B. Choudhary**, “Nano exploration of conduction polymers for conjugated electronic configuration” *Chemical Business*, Vol. 23, No. 2 (2008) 35.
- ❖ **R.B. Choudhary**, “Growth perspective in nanotechnology for solid phase nano materials” *Chemical Business*, Vol. 22, No. 2 (2008) 23.

- ❖ **R.B. Choudhary**, “Nano development in Indian pulp and paper industries and its R&D status” *Chemical Business*, Vol. 22, No. 3 (2008) 18.
- ❖ **R.B. Choudhary**, “Nano impact of motor pollution and curative search for clean and green fuels” *Chemical Business*, Vol. 22, No. 4 (2008) 18.
- ❖ **R.B. Choudhary**, “Feature characteristics and mechanisms of action for photo-dissociation” *Chemical Business*, Vol. 22, No. 10 (2008) 41.
- ❖ **R.B. Choudhary**, M. Kamboj, “Dacro coating: hydrogen embrittlement free and cost effective anti-corrosion coating technology for automotive, navigation & marine engineering application.” *Paint India (Colour Publication)* Vol. 59 No. 9 (2009) 99
- ❖ **R.B. Choudhary**, “Preservative Potential of Calcium Chloride Triggered for application” *Chemical Business*, Vol. 23, No. 3 (2011) 32.
- ❖ **R.B. Choudhary**, “Processing, properties and utility features of conducting PANI nano composites” *Chemical Business*, Vol. 27, No. 1 (2013) 12.
- ❖ **R.B. Choudhary**, “EA-properties and utility features of PIN and nanocomposite for electronic devices” *Chemical Business*, Vol. 27, No. 9 (2013) 10.

C. Conference (Non-SCI) Papers

- ❖ **R.B. Choudhary**, “Polypyrrole/ graphene/ cadmium sulphide based polymeric nanocomposite for optoelectronic device fabrication.” *Advances in Functional Materials* (AFM-2017) University of California, Los Angeles (UCLA), California USA, August 2017.
- ❖ P. Maji, **R.B. Choudhary** and M. Majhi, “Effect of Y_2O_3 on polyindole (PIN) for high frequency capacitor applications.” *The AIP Conference Proceedings*; 1832, 070003 (2017), DOI: 10.1063/1.498 0438.
- ❖ A.K. Thakur, M. Majumder, **R.B. Choudhary** and S. N. Pimpalkar, “Supercapacitors based on electro- polymerized polythiophene and MWNTs composites.” *IOP Conf. Series: Mat. Sci. & Engg.* 149 (2016) 12166, DOI: 10.1088/1757-899X/149/1/012166.
- ❖ **R.B. Choudhary** and A.K. Thakur, “Synthesis, characterization and properties of the PTP - TiO_2 composites for its use as electrolyte membrane in fuel cell application.” *Conference Proceeding on Energy Materials & Research*, Complutense University Madrid, SPAIN February 2015.
- ❖ A.K. Thakur, **R.B. Choudhary**, S.D. Sartale and M. Desai, “Polythiophene-carbon nanotubes composites as the energy storage materials for supercapacitor applications.” *The AIP Conference Proceedings* 1728, 020030 (2016), DOI: 10.1063/1.4946080.
- ❖ A.V. Gowd, M. Chakraborty, **R.B. Choudhary** and R.Thangavel, “Dielectric properties of SnO nanocrystals synthesized by hydrothermal method”, *International Symposium on Semiconductor Materials & Devices* (ISSMD) February 2015.
- ❖ **R.B. Choudhary**, “An Investigation on tribo-chemical reactions of AF/AW additive compounds of alkyl thio-octadecenoate origin.” *Global Science and Technology Forum Conference Proceedings*, Anson Road, Singapore DOI: 10.5176/2301376-CCECP.04, February 2013.

- ❖ O.N. Anand, **R.B. Choudhary** and R.P.S. Bisht, “Chemisorbed reaction films of derivatives of methyl ricinoleate and its friction and wear characteristics.” *Proceeding on Advances in Industrial Tribology 1CIT-97*, Editor: J. Bhatia Calcutta, December 1997
- ❖ **R.B. Choudhary**, R.P.S. Bisht and PC Nautiyal, “Moly friction modifier for the solid-solid interface lubrication.” *Proceeding on Current Trends in Industrial Tribology NCIT-95*, Editor: A.K. Mehta New Delhi, January 1995.
- ❖ R. Kandulna, **R.B. Choudhary**, and R. Singh, “TiO₂ reinforced PMMA-TiO₂ nanocomposite for its application in organic light emitting diode as electron transport layer material.” *The AIP Conference Proceedings* (2017) BARC, p. 110057. DOI:10.1063/1.5029040, December 26-30, 2017.
- ❖ Purty, **R.B. Choudhary**, Significant enhancement in volumetric and gravimetric capacitance of Cu-TiO₂/PPY composite for supercapacitor application”, DAE SSPS-017, BARC p.140085. DOI: 10.1063/ 1.5029216. Dec 26-30, 2017.
- ❖ Purty and **R.B. Choudhary**, R. Kandulna, R. Singh, “Binder free MnO₂/PIn electrode material for supercapacitor applications” ICC-2017, Nov. 24-25, 2017, Bikaner, p.030178, DOI:10.1063/1.5032513.
- ❖ R. Singh, **R.B. Choudhary**, R. Kandulna, “Optical band gap tuning and electrical properties of PANI and its nanocomposites for hybrid solar cell application” , p.030179. DOI:10.1063/1.5032514.
- ❖ R. Kandulna and **R.B. Choudhary**, “Robust electron transports properties of PANI/PPY/ ZnO Polymeric nanocomposites for OLED applications, Optik (Stuttg)” 144 (2017) 40–48. DOI:10.1016/j.ijleo.2017.06.094.
- ❖ R. Kandulna, R. Singh, **R.B. Choudhary**, “Structure, optical and electrical Investigation of tertiary nanocomposite PANI-PPY-ZnO OLED application” ICNANO-17, VBRIS Allahabad, March 2017
- ❖ A.K. Thakur, M. Majumder and **R.B. Choudhary**,” Supercapacitor based on electro polym- erized polythiophene and multi-walled carbon nanotubes composites” ICAMMA-2016, ASEAV Bangalore, July 14-16, 2016.
- ❖ A.K. Thakur, M. Majumder, **R.B. Choudhary**, “Fairly improved pseudocapacitance of PTP/ PANI/ TiO₂ nanohybrid composite electrode material for supercapacitors” ACSSI-2016, IIT Patna. November 27-30, 2016
- ❖ R. Singh, M. Majhi, **R.B. Choudhary**, “Effect of Temperature on Phase Transition of Fe Doped ZnO (Fe:ZnO) Nanoparticle Reinforced PMMA Matrix” Q-Pace, IIT(ISM) Dhanbad, January 09-11, 2016.

- ❖ P. Maji, M. Majhi, and **R.B. Choudhary**, “Effect of yttrium oxide (Y₂O₃) on Polyindole (PIN) for High Frequency Capacitor Application”, DAE-SSPS-2016, KIITU Bhubaneswar, December 26-30, 2016.
- ❖ R. Kandulna, M. Majumder, **R.B. Choudhary**, “Synthesis and Supercapacitive Evolution of Binary Composite of Polypyrrole-Molybdenum Disulphide composite, Q-Pace 2016, IIT(ISM) Dhanbad, January 9-11, 2016.
- ❖ K. Thakur, **R.B. Choudhary**, S.D. Sartale, Mangesh Desai, “Polythiophene-Carbon Nanotube composites as energy storage materials for supercapacitor application”, ICC - 2015, Bikaner (Raj.) October 30-31, 2015.
- ❖ P. Maji, **R.B. Choudhary**, “Dielectric response measurement of poly (methacrylate) (PMMA) for its use in capacitor at high frequency”, SPPS-2013, IIT(ISM) Dhanbad, November 18-20, 2013.
- ❖ P. Maji, M. Majhi and **R.B. Choudhary**, “Addition of Kh-570 modified ZnO nanosphere to PMMA matrix: Impact on dielectric properties”, ICNNAM-2015, Tamil Nadu, December 14-17, 2015.
- ❖ P. Maji, M. Majhi, **R.B. Choudhary**, “Investigation on structural and dielectric properties of FE doped ZnO-PMMA nanocomposite” ICAMPE-2015, Kerala.
- ❖ M. Majhi, **R.B. Choudhary**, “Synthesis, characterization and dielectric properties of polyaniline/ polythiophene/ titanium oxide nanocomposite” ICAMPE-2015, Kerala.
- ❖ M. Majhi, P. Maji, **R.B. Choudhary**, “Studies on dielectric and electrical properties of polyaniline TiO₂ nanocomposite” NANO-15, Tamil Nadu, December 14-17, 2015.

D. Book Chapter

- ❖ **R.B. Choudhary**, M. Majumder, A.K. Thakur, R. Boukherroub, S. Szunerits, “High-quality carbon nanotubes and graphene produced from MOFs and their supercapacitor application” *Mono Elements: Properties & Applications*, Wiley-Scrivener (In Press, 2020).
- ❖ **R.B. Choudhary** and A.K. Thakur, “*Materials & Technologies for Energy Efficiency*” Brown Walker Press, Florida USA, Editor: A. Méndez Vilas, October 2015 (ISBN 10:1627345590; ISBN13: 9781627345590).

E. Reference Book

- ❖ **R.B. Choudhary** and M.K. Sharma, “*Surface Engineering & Engineering Tribology*” Publisher: R. Chand & Sons Company, Aruna Asaf Ali Road, New Delhi India, February 2012, (ISBN: 81-8045-081-3; PP-259).



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