PERSONAL INFORMATION

Dr. TAPAS KUILA,
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WORK EXPERIENCE

2012 – Till Date	**Senior Scientist,** *CSIR-Central Mechanical Engineering Research Institute, Durgapur, India (8th Nov. 2017 to till date)*
2012 - 2017	**DST INSPIRE Faculty Fellow,** *CSIR-Central Mechanical Engineering Research Institute, Durgapur, India (26th Nov. 2012 to 7th November, 2017)*
2010 - 2012	**Research Professor & Postdoctoral Fellow,** *Chonbuk National University, Jeonju, South Korea (1st Nov. 2010 to 31st Oct. 2012)*
2010-2010	**Assistant Prof.,** Sikkim University, Sikkim, India (*7th July to 22nd October, 2010*)
2009 - 2010	**Postdoctoral Fellow,** *Chonbuk National University, Jeonju, South Korea (1st Sept. 2009 to 7th Jul. 2010)*

EDUCATION AND TRAINING

2005 - 2009	*Indian Institute of Technology, Kharagpur, India* ***Thesis title:*** *Preparation, Characterization and Properties of Ethylene Vinyl Acetate, Copolymer/Mg-Al Layered Double Hydroxide Nanocomposites*
2002 - 2004	**Master of Science** in Chemistry **(1st Class, 73.40%),** *Vidyasagar University, West Bengal, India*
1999 - 2002	**Bachelor of Science** in Chemistry (Hons) **(1st Class, 60.0%),** *Midnapore College, West Bengal, India*
1997 – 1999	**Higher Secondary (1st Div., 75.5%),** *West Bengal Board of Secondary Education, India*
1995 – 1997	**Secondary (1st Div., 80.1%),** *West Bengal Board of Secondary Education, WB, India*

KEY ACHIEVEMENTS/JOB RELATED SKILLS

✓ ***Product/Technologies developed at CSIR-CMERI***

- Graphene Supercapacitor ***(Energy density ~120 Wh/Kg)***
- Graphene Ink for Flexible Electronics ***(Graphene Ink)***
- Graphene Lubricant (***cof ~0.04***)
- Graphene/CF/Epoxy Composite (***UTS ~41% improvement***)
- Scaled-up graphene oxide production technology (***200 g/batch & 2.5 kg/batch***)
- Graphite oxide production technology transfer to ***M/s. Auropol India Pvt. Ltd***, Kolkata (***Rs. 15 Lakhs, Nonexclusive***)

✓ ***Publications:*** **Journals = 115** and **Book Chapters = 14**
(*Total Google Scholar* ***Citations***: **10,301**; ***h-index***: **41 &** *i10-****index***: **83**; *Total* ***IF*** = **595.732**)

✓ ***Ph.D Guidance:*** **Awarded = 02,** On-going **= 06**

AWARDS & RECOGNITION

- ✓ **MSEB Best Paper Award 2014**

  MSEB Best Paper Award, 2014 for the research article entitled "Bio-reduction of graphene oxide using drained water from soaked mung beans (Phaseolus aureus L) and its application as energy storage electrode material" published in Materials Science and Engineering B (2014, 186, 33-40), Elsevier.

- ✓ **DST INSPIRE Faculty Award 2012**

  DST Inspire Faculty Award in Chemistry, August 27, 2012, DST and INSA India.

- ✓ **Best Presentation Award - 2012**

  2012 Workshop on WCU BIN Technology, Department of BIN Fusion Technology, Chonbuk National University, Jeonju 561756, South Korea.

- ✓ **PFAM Best Paper Award 2011**

  20th International Symposium on Processing and Fabrication of Advanced Materials. 15-18 December 2011, Hong Kong Polytechnic University, Hong Kong SAR China.

- ✓ **Qualified Graduate Aptitude Test in Engineering (GATE) 2004**

  Department of Higher Education, Ministry of Human Resource Development (MHRD), Government of India.

- ✓ **Senior Research Fellowship (SRF)**

  Human Resource Development Group (HRDG), Council of Scientific & Industrial Research (CSIR) – January 2007 – July 2009

- ✓ **Junior Research Fellowship (JRF)**

  Human Resource Development Group (HRDG), Council of Scientific & Industrial Research (CSIR) – January 2005 – July 2007.

RESEARCH INTERESTS

- ✓ Surface modification of Graphene, CNT, Layered Clay Minerals
- ✓ Electrochemistry, Graphene Supercapacitor, Electrochemical Sensing
- ✓ Surface Chemistry, Tribology, Graphene Lubricant, Coating, Polymer Composites

TEACHING INTERESTS

Willing to teach full the range of undergraduate and postgraduate level courses in the field of Physical Chemistry, Renewable Energy Polymer Chemistry and Nanoscience/ Nanotechnology. I am always very keen to develop new strategies in teaching and learning at higher education level to enhance the learning experience for students.

REFERENCES

1. Prof. Suneel Kumar Srivastava(*PhD Guide*)
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2. Dr. N. C. Murmu, *HOD*
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ANNEXURE

On-Going/Completed Projects

JCBCAT-DRDO, Co-PI	Graphene Ultracapacitor Module to integrate with Electrical Power Supply for Hybrid Unmanned Ground Vehicle and other Pulse Applications **(Rs. 468 Lakhs), (*Nov, 2017 to Nov. 2020*)**
CSIR-New Delhi, ***Co-Principal Investigator***	Design and development of mob control vehicle (**Nov. 2017 to Nov. 2019**)
DST, New Delhi, ***Principal Investigator***	Synthesis of single layer graphene and its polymer nanocomposites for the fabrication of a high performance flexible electrode (**Rs. 35 lakhs**), ***(Dec. 2012 to Nov. 2017)***
Chonbuk National University and Industrial Cooperation Foundation, South Korea, ***Principal Investigator***	Surface coating of nylon and stainless steel using graphene-based composite materials (**Korea Won 40 million**): ***(Nov. 2014 to Sept.2016)***
CSIR, New Delhi, ***Co- Principal Investigator***	Graphene-based rechargeable energy storage micro device (**Rs 181 lakhs**) ***(Jun. 2013 to Mar. 2017)***
DST, New Delhi, *Role:* ***Co- Principal Investigator***	Manufacturing Process for Developing the Automotive Parts using Graphene Based Polymer Nanocomposites (**Rs 5 lakhs**) ***(Nov. 2014 to Oct. 2015)***
DST, New Delhi, *Role:* ***Co- Principal Investigator***	Manufacturing Technology of Graphene-based Polymer Composite for Mech. Stable and their Durable Auto. Components ***(Dec. 2016 to Nov. 2019)***
SONA BLW Precision Forging Ltd., Gurgaon, Haryana, India**,** *(a conglomerate of USD 800 million SONA Group).* ***Co- Principal Investigator***	Preliminary Investigation on Water and Organic Dispersion of Graphene-Based Die Lubricants for Hot Forging Application (**Rs. 15 lakhs**), ***(Nov. 2014 to Oct. 2015)***
DST, New Delhi, ***Co- Principal Investigator***	Design and Development of Electrohydrodynamic Ink Jet Printing System (**Rs 116 lakhs**) ***(April, 2016 to March 2019)***
CSIR-New Delhi, ***Principal Investigator***	Graphene-Based Aqueous Lubricants (**119.64 Lakhs**) (**July 2016 to June 2018**)

List of Publications in Peer-Reviewed Journals (* Indicates Corresponding Author)

2019

1. Chhetri, S.; Adak, N. C.; Samanta, P.; Murmu, N. C.; Srivastava, S. K.; **Kuila, T***. Fe_3O_4 anchored N-doped rGO incorporated epoxy composites with high electrical conductivity and excellent shielding for electromagnetic pollution. ***Composite Part B: Engineering*** **(In Press - 2019)**. (**I.F.- 4.727**).

2. Adak, N. C.; Chhetri, S.; Murmu, N. C.; Samanta, P.; **Kuila, T***. Analytical and Experimental Investigation on Magnetorheological Behavior of $CoFe_2O_4$-rGO Incorporated Epoxy Fluid Composites. ***Advanced Composites and Hybrid Materials***, **2019** (In Press). (**I.F.- Pending**).

3. Paul, G.; Hirani, H.; **Kuila, T***.; Murmu, N. C. Nanolubricants Dispersed with Graphene and its Derivatives: An Assessment and Review of the Tribological Performance. ***Nanoscale***, **2019** (In Press). (**I.F.- 7.233**).

4. Chhetri, S.; Samanta, P.; Murmu, N. C.; **Kuila, T***. Anti-corrosion properties of the epoxy composite coating reinforced by molybdate intercalated functionalized layered double hydroxide. ***Journal of Composite Sciences*****, 2019,** 3, 11**.** (**I.F.- Pending**).

5. Saha, S.; Jang, W.; Murmu, N. C.; Koo, H.; **Kuila, T***. Optimization of chemi-adsorption, EDLC, and redox capacitance through electro-precipitation synthesis of Fe_3O_4/NiO@rGO/h-BN for the development of hybrid supercapacitor. ***ChemistrySelect***, **2019,** 4, 589-599**.** (**I.F.- 1.505**).

6. Paul, G.; Shit, S.; Hirani, H.; **Kuila, T***.; Murmu, N. C. Tribological behavior of dodecylamine functionalized graphene nanosheets dispersed engine oil nanolubricants. ***Tribology International*****, 2019,** 131, 605-619**.** (**I.F.- 3.246**).

7. Kumar, J. S.; Ghosh, S.; Murmu, N. C.; Mandal, N.; **Kuila, T***. Electrochemical detection of H_2O_2 using copper oxide-reduced graphene oxide heterostructure. ***Journal of Nanoscience & Nanotechnology*****, 2019 (In Press).** (**I.F.- 1.354**).

8. Kumar, J. S.; Murmu, N. C.; Banerjee, A.; Ganesh, R. S.; Inokawa, H.; **Kuila, T***. A SILAR method for the fabrication of layer-by-layer assembled Cu_2O-reduced graphene oxide composite for non-enzymatic detection of hydrogen peroxide. ***Materials Research Express*****, 2019,** 6, 025045**.** (**I.F.- 1.151**).

9. Adak, N. C.; Chhetri, S.; Murmu, N. C.; Samanta, P.; **Kuila, T***.; Lee, J. H. Experimental and numerical investigation on the mechanical characteristics of polyethylenimine functionalized graphene oxide incorporated woven carbon fibre/epoxy composites. ***Composite Part B: Engineering*****, 2019**, 156, 240-251. (**I.F.- 4.727**).

2018

10. Shit, S.; Chhetri, S.; Bolar, S.; Murmu, N. C.; Jang, W.; Koo, H.; **Kuila, T***. Hierarchical cobalt sulfide @ molybdenum sulfide heterostructure as a bifunctional electrocatalyst towards overall water splitting. ***ChemElectroChem*****, 2018**, 5, 1-10. (**I.F.- 4.446**).

11. Shit, S.; Chhetri, S.; Jang, W.; Murmu, N. C.; Koo, H.; Samanta, P.; **Kuila, T***. Cobalt sulphide/nickel sulphide heterostructure directly grown on nickel foam: an efficient and durable electrocatalyst for overall water splitting application. ***ACS Applied Materials and Interface*****, 2018,** 10, 27712-27722. (**I.F.- 8.097**).

12. Chhetri, S.; Adak, N. C.; Samanta,P.; Murmu,N. C.; **Kuila, T*.** Exploration of mechanical and thermal properties of the cetyltrimethylammonium bromide modified molybdenum disulfide (MoS_2)/Linear low density polyethylene composites prepared by melt mixing. ***Journal of Composite Sciences*****, 2018,** 2, 37**.** (**I.F.- Pending**).

13. Chhetri, S.; Adak, N. C.; Samanta, P.; Murmu, N. C.; **Kuila, T*.** Rheological, mechanical, and thermal properties of silane grafted layered double hydroxide/epoxy composites. ***Industrial & Engineering Chemistry Research*****, 2018,** 57, 8729-8739**.** (**I.F.- 2.843**).

14. Adak, N. C.; Chhetri, S.; **Kuila, T**.; Murmu, N. C.; Samanta, P.; Lee J. H. Effect of hydrazine reduced graphene oxide on Inter-laminar Fracture Toughness of woven carbon fiber/epoxy composite. ***Composite Part B: Engineering*****, 2018**, 149, 22-30. (**I.F.- 4.727**).

15. Saha, S.; Kumar, J. S.; Murmu, N. C.; Samanta, P.; **Kuila, T*.** Controlled electrodeposition of Iron oxide/Nickel oxide@Ni for the investigation of the effect of stoichiometry and particle size on energy storage and water splitting application. ***Journal of Materials Chemistry A*** **2018**, 6, 9657-9664. (**I.F.-9.931**).

16. Kumar, J. S.; Murmu, N. C.; **Kuila, T***. Recent trends in the graphene-based sensor for the detection of hydrogen peroxide. ***AIMS Material Science*****, 2018,** 5, 422-466**.** (**I.F.- Pending**).

17. Saha, S.; Samanta, P.; Murmu, N. C.; **Kuila, T*.** A review on the heterostructure nanomaterials for supercapacitor applications. ***Journal of Energy Storage*** **2018**, 17, 181-122. (**I.F.- Pending**).

18. Adak, N. C.; Chhetri, S.; Murmu, N. C.; Samanta, P.; **Kuila, T*.** Effect of Thermally Reduced Graphene Oxide on Mechanical Properties of Woven Carbon Fiber/Epoxy Composite. ***Crystals*** **2018**, 8(3), 111. (**I.F.- 1.566**).

19. Chhetri, S.; Adak, N. C.; Samanta, P.; Murmu, N. C.; Hui, D.; **Kuila, T.***; Lee, J. H. Investigation of the mechanical and thermal properties of L-glutathione modified graphene/epoxy composites. ***Composite Part B: Engineering*** **2018,** 143, 105-112. (**I.F.- 4.727**).

20. Saha, S.; Samanta, P.; Murmu, N. C.; Banerjee, A.; Ganesh, R. S.; Inokawa, H.; **Kuila, T*.** Modified electrochemical charge storage properties of h-BN/rGO superlattice through the transition from n to p type semiconductor by fluorine doping. ***Chemical Engineering Journal*** **2018,** 333, 334-345. (**I.F.-6.216**).

21. Kumar J. S.; Murmu, N. C.; Samanta, P.; Banerjee, A.; Ganesh, R. S.; Inokawa, H.; **Kuila, T*.** Novel synthesis of Cu_2O-graphene nano platelet composite through two step electrodeposition method for selective detection of hydrogen peroxide. ***New Journal of Chemistry*** **2018,** 42, 3574-3581. (**I.F.-3.269**).

22. Adak, N. C.; Chhetri, S.; Kim, N. H.; Murmu, N. C.; Samanta, P.; **Kuila, T*.** Static and dynamic mechanical properties of graphene oxide-incorporated woven carbon fiber/epoxy composite. ***Journal of Materials Engineering and Performance*** **2018,** 27, 1138-1147. (Accepted.) (**I.F.-1.331**).

23. Chhetri, S.; Adak, N. C.; Samanta, P.; Phani Kumar, M.; Murmu, N. C.; **Kuila, T*.** Interface engineering for the improvement of mechanical and thermal properties of covalent functionalized graphene/epoxy composites. ***Journal of Applied Polymer Science*** **2018,** 135, 46124-46434. (**I.F.-1.86**).

2017

24. Saha, S.; Samanta, P.; Murmu, N. C.; **Kuila, T***. Investigation of surface plasmon polariton and electrochemical property of covalent and non-covalent functionalized reduced graphene oxide. ***Physical Chemistry Chemical Physics*** **2017**, 19, 28588 - 28595. (**I.F.-4.123**).

25. Jana, M.; Samanta, P.; Murmu, N. C.; **Kuila, T***. Surface modification of reduced graphene oxide through successive ionic layer adsorption and reaction method for redox dominant supercapacitor electrodes. ***Chemical Engineering Journal*** **2017,** 330, 914-925. (**I.F.-6.216**).

26. Chhetri, S.; Adak, N. C.; Samanta, P.S.; Murmu, N. C.; **Kuila, T***. Functionalized reduced graphene oxide/epoxy composites with enhanced mechanical properties and thermal stability. ***Polymer Testing*** **2017,** 63, 1-11. (**I.F.-2.44**).

27. Jana, M.; Samanta, P.; Murmu, N. C.; **Kuila, T***. Morphology controlled synthesis of $MnCO_3$-RGO materials and their supercapacitor applications. ***Journal of Materials Chemistry A*** **2017**, 5, 12863-12872. (**I.F.- 9.931**).

28. De, B.; **Kuila, T.**; Kim, N. H.; Lee, J. H. Carbon dot stabilized copper sulphide nanoparticles decorated graphene oxide hydrogel for high performance asymmetric supercapacitor. ***Carbon*** **2017**, 122, 247-257. (**I.F.-6.337**).

29. Chhetri, S.; Adak, N. C.; Samanta, P.; Mandal, N.; **Kuila, T.***; Murmu, N. C*. Investigation of mechanical and thermal properties of the cetyltrimethylammonium bromide functionalized molybdenum disulfide (MoS_2)/epoxy composites. ***Polymer Bulletin*** **2017** (doi:10.1007/s00289-017-2037-8) (**I.F.-1.43**).

30. Saha, S.; Samanta, P.; Murmu, N. C.; Kim, N. H.; Lee, J. H.; **Kuila, T***. Electrochemical functionalization and in-situ deposition of the SAA@rGO/h-BN@Ni electrode for supercapacitor applications. ***Journal of Industrial and Engineering Chemistry*** **2017**, 52, 321-330. (**I.F.-4.421**).

31. Saha, S.; Jana, M.; Samanta, P.; Murmu, N. C.; Kim, N. H.; **Kuila, T***, Lee, J. H. Investigation of band structure and electrochemical properties of h-BN/rGO composites for asymmetric supercapacitor applications. ***Materials Chemistry and Physics*** **2017,** 190, 153-165. (**I.F.-2.084**).

32. Jana, M.; Saha, S.; Samanta, P.; Murmu, N. C.; Kim, N. H.; **Kuila, T***, Lee, J. H. A successive ionic layer adsorption and reaction (SILAR) method to fabricate a layer-by-layer (LbL) MnO_2-reduced graphene oxide assembly for supercapacitor application. ***Journal of Power Sources*** **2017,** 340, 380-392. (**I.F.-6.395**).

33. Chhetri, S.; Samanta, P.; Murmu, N. C.; Srivastava, S. K.; **Kuila, T***. Electromagnetic interference shielding and thermal properties of non-covalently functionalized reduced graphene oxide/epoxy composites. ***AIMS Materials Science*** **2017**, 4, 61-74.

34. Bandyopadhyay, P.; **Kuila, T.**; Balamurugan, J.; Nguyen, T. N.; Kim, N. H.; Lee, J. H. Facile synthesis of novel sulfonated polyaniline functionalized graphene using m-aminobenzene sulfonic acid for asymmetric supercapacitor application. ***Chemical Engineering Journal*** **2017,** 308, 1174-1184. (**I.F.-6.216**).

2016

35. Saha, S.; Jana, M.; Samanta, P.; Murmu, N. C.; Kuila, T. Efficient access of voltametric charge in hybrid supercapacitor configured with potassium incorporated nano-graphitic structure derived from cotton (Gossypium arboreum) as negative and $Ni(OH)_2$/rGO composite as positive electrode. ***Industrial & Engineering Chemistry Research*** **2016,** 55, 11074-11084 (**I.F.-2.843**).

36. Park, W. B.; Bandyopadhyay, P.; Nguyen, T. N.; Kuila, T.; Kim, N. H.; Lee, J. H. Effect of high molecular weight polyethyleneimine functionalized graphene oxide coated polyethylene terephthalate film on the hydrogen gas barrier properties. ***Composites Part B*** **2016**, 106, 316-323. (**I.F.-4.727**).

37. Chhetri, S.; Samanta, P.; Murmu N. C.; Srivastava, S. K.; **Kuila, T*.** Effect of dodecyal amine functionalized graphene on the mechanical and thermal properties of epoxy-based composites. ***Polymer Engineering and Science*** **2016** (In Press) DOI 10.1002/pen.24355 (**I.F.-1.449**).

38. Divya, S.; Remith, P.; **Kuila, T.**; Kalaiselvi, N.; Srivastava, S. K.; Roy, P. Spinel-Structured $NiCo_2O_4$ Nanorods as Energy Efficient Electrode for Supercapacitor and Lithium Ion Battery Applications. ***Journal of Nanoscience and Nanotechnology***, 2016, 16, 9761-9770 (**I.F.-1.556**).

39. Saha, S.; Chhetri, S.; Khanra, P.; Samanta, P.; Koo, H.; Murmu, N. C.; **Kuila, T***. *In-situ* hydrothermal synthesis of MnO_2/NiO@Ni hetero structure electrode for hydrogen evolution reaction and high energy asymmetric supercapacitor applications. ***Journal of Energy Storage*** **2016**, 6, 22-31. (**I.F.- Pending**).

40. Kumar, J. S.; Jana, M.; Khanra, P.; Samanta, P.; Koo, H.; Murmu, N. C.; **Kuila, T***. One pot synthesis of Cu_2O/RGO composite using mango bark extract and exploration of its electrochemical properties. ***Electrochimica Acta*** **2016**, 193, 104-115. (**I.F.-4.798**).

41. Jana, M.; Saha, S.; Samanta, P.; Murmu, N. C.; Kim, N. H.; **Kuila, T***, Lee, J. H. Growth of Ni-Co binary hydroxide on reduced graphene oxide surface by a successive ionic layer adsorption and reaction (SILAR) method for high performance asymmetric supercapacitor electrode. ***Journal of Materials Chemistry A*** **2016**, 4, 2188-2197. (**I.F.- 9.931**).

42. Bae, H. B.; Layek, R. K.; Lee, S. H.; **Kuila, T.**; Kim, N. H.; Lee, J. H. Effects of the reduction of PANI-coated oxidized multiwall carbon nanotubes on the positive temperature coefficient behaviors of their carbon black/high density polyethylene composites. ***Polymer Testing*** **2016**, 50, 83-93. (**I.F.-2.464**).

43. Saha, S.; Jana, M.; Khanra, P.; Samanta, P.; Koo, H.; Murmu, N. C.; **Kuila, T***. Band gap modified boron doped NiO/Fe_3O_4 nanostructure as the positive electrode for high energy asymmetric supercapacitor. ***RSC Advances*** **2016,** 6, 1380-1387. (**I.F.-3.108**).

44. Jana, M.; Kumar, J. S.; Khanra, P.; Samanta, P.; Koo, H.; Murmu, N. C.; **Kuila, T***. Superior performance of asymmetric supercapacitor based on reduced graphene oxide-manganese carbonate as positive and sono-chemically reduced graphene oxide as negative electrode materials. ***Journal of Power Sources*** **2016**, 303, 222-233. (**I.F.-6.395**).

2015

45. Saha, S.; Jana, M.; Samanta, P.; Murmu, N. C.; **Kuila, T***. In situ preparation of SAC-RGO@Ni electrode by electrochemical functionalization of reduced graphene oxide using sulfanilic acid azocromotrop and its application in Asymmetric supercapacitor. ***Journal of Materials Chemistry A*** **2015,** 3, 19461-19468. (**I.F.-9.931**).

46. Saha, S.; Jana, M.; Khanra, P.; Samanta, P.; Koo, H.; Murmu, N. C.; **Kuila, T***. Band gap engineering of boron nitride by graphene and its application as positive electrode material in asymmetric supercapacitor device. ***ACS Applied Materials & Interfaces*** **2015**, 7, 14211-14222. (**I.F.-8.097**).

47. Jana, M.; Saha, S.; Khanra, P.; Samanta, P.; Koo, H.; Murmu, N. C.; **Kuila, T***. Non-covalent functionalization of reduced graphene oxide using sulfanilic acid azocromotrop and its application as supercapacitor electrode material. ***Journal of Materials Chemistry A*** **2015,** 3, 7323-7331. (**I.F.- 9.931**).

48. Zhang, C.; **Kuila, T.**; Kim, N. H.; Lee, S. H.; Lee, J. H. Facile preparation of flower-like $NiCo_2O_4$/three dimensional graphene foam hybrid for high performance supercapacitor electrodes. ***Carbon*** **2015**, 89, 328-339. (**I.F.-7.082**).

49. Srivastava, M.; Singh, J.; **Kuila, T.**; Layek, R. K.; Kim, N. H.; Lee, J. H. Recent advances in graphene and its metal-oxide hybrid nanostructured for lithium-ion batteries. ***Nanoscale*** **2015** 7, 4820-4868. (**I.F.-7.367**).

50. Jana, M.; Saha, S.;Samanta, P.; Murmu, N. C.; Kim, N. H.; **Kuila, T.***; Lee, J. H. Development of high energy density supercapacitor through hydrothermal synthesis of RGO/nano-structured cobalt sulphide composites. ***Nanotechnology*** **2015**, 26, 075402 (**I.F.-3.44**).

51. Yan, Y.; **Kuila, T.***; Kim, N. H.; Lee, J. H. N-doped carbon layer coated thermally exfoliated graphene and its capacitive behavior in redox active electrolyte. ***Carbon*** **2015,** 85, 60-71. (**I.F.- 7.082**).

52. Khanra, P.; Uddin, Md. E.; Kim, N. H.; **Kuila, T.**; Lee, J. H. Electrochemical performance of reduced graphene o xide surface-modified with 9-anthracene carboxylic acid. ***RSC Advances*** **2015,** 5, 6443-6451 (**I.F.-3.108**).

53. Jana, M.; Saha, S.; Samanta, P.; Murmu, N. C.; Lee, J. H.; **Kuila, T.*** Investigation of the capacitive performance of tobacco solution reduced graphene oxide. ***Materials Chemistry and Physics*** **2015,** 151, 72-80 (**I.F.-2.084**).

54. Uddin, Md.; Kim, N. H.; **Kuila, T.**; Lee, S. H.; Hui, D.; Lee, J. H. Preparation of reduced graphene oxide-$NiFe_2O_4$ nanocomposites for the electrocatalytic oxidation of hydrazine. ***Composite Part B: Engineering*** **2015,** 79, 649-659. (**I.F.-4.727**).

2014

55. Khanra, P.; Lee, C. N.; **Kuila, T.**; Kim, N. H.; Park. M. J.; Lee, J. H. 7,7,8,8-tetracyanoquinodimethane-assisted o ne-step electrochemical exfoliation of graphite and its performance as an electrode material. ***Nanoscale*** **2014**, 6, 4 864-4873 (**I.F.-7.367**).

56. Tongwu, J.; **Kuila, T.**; Kim, N. H.; Lee, J. H. Effects of surface-modified silica nanoparticles attached graphene o xide using isocyanate-terminated flexible polymer chains on the mechanical properties of epoxy composites. ***Jour nal of Materials Chemistry A*** **2014,** 2, 10557-10567. (**I.F.- 9.931**).

57. Kim, N. H.; **Kuila, T.**; Lee, J. H. Enhanced mechanical properties of multiwall carbon nanotube attached pre-stitched graphene oxide filled linear low density polyethylene composite. ***Journal of Materials Chemistry A*** **2014**, 2, 2681-2689. (**I.F.- 9.931**).

58. Hang, Z.; **Kuila, T.**; Kim, N. H.; Yu, D. S.; Lee, J. H. Simultaneous reduction, exfoliation and nitrogen doping of graphene oxide via hydrothermal reaction for the development of high performance energy storage electrode material. ***Carbon*** **2014,** 69, 66-78. (**I.F.- 7.082**).

59. Yan, Y.; **Kuila, T.**; Kim, N. H.; Lee, J. H. Effects of acid vapour mediated oxidization on the electrochemical perf ormance of thermally exfoliated graphene. ***Carbon*** **2014**, 74, 195-206 (**I.F.- 7.082**).

60. Dong, Y. S.; **Kuila, T.**; Kim, N. H.; Zhang, H.; Lee, J. H. Enhanced properties of aryl diazonium salt-functionalized graphene/poly (vinyl alcohol) composites. ***Chemical Engineering Journal*** **2014,** 245, 311-322 (**I.F.- 6.216**).

61. Saha, S.; Jana, M.; Samanta, P.; Murmu, N. C.; Kim, N. H.; **Kuila, T.***; Lee, J. H. Hydrothermal synthesis of Fe_3O_4/RGO composites and investigation of electrochemical performances for energy storage application. ***RSC Adva nces*** **2014**, 4, 44777-44785 (**I.F.-3.108**).

62. Jana, M.; Khanra, P.; Murmu, N. C.; Lee, J. H.; **Kuila, T***. Covalent surface modification of chemically derived gr aphene and its application as supercapacitor electrode material. ***Physical Chemistry Chemical Physics*** **2014,** 16, 7618-7626. (**I.F.-4.123**).

63. Hasan, A.; Nurunnabi, Md.; Morshed, M.; Paul, A.; Polini, A.; **Kuila, T.**; Hariri, M. A.; Lee, Y. K.; Jaffa, A. A. Recent advances in application of biosensors in tissue engineering. ***BioMed Research International*** Volume 201 4, **2014,** Article ID 307519 (**I.F.-2.476**).

64. Jana, M.; Khanra, P.; Murmu, N. C.; Lee, J. H.; **Kuila, T***. Bio-reduction of graphene oxide using drained water f rom soaked mung beans (Phaseolus aureus L) and its application as energy storage electrode material. ***Materials S cience and Engineering B*** **2014**, 186, 33-40. (**I.F.-2.552**). Achieved ***MSEB Best Paper Award*** from **Elsevier in 2014** (***Selected from 171 Published Article***).

2013

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LIST OF ARTICLES PUBLISHED IN CONFERENCE PROCEEDINGS

1. Chhetri, S.; Adak, N.; Samanta, P.; Murmu, N. C.; **Kuila, T*.** Investigation of mechanical properties of non-covalently functionalized reduced graphene oxide/epoxy composite. Advanced Functionalized Mate rials Processing & Manufacturing, February 2-3, 2017, Page 18, CSIR-CMERI, ***Durgapur, India***.
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3. **Kuila, T.;** Kim, K. M.; Yang, J.; Kim, N. H.; Lee, J. H. A green route for the reduction of graphene oxide. Korean Society of Composite Materials-2011, Korea. ***Korean Society of Composite Materials-2012, Korea***.