

## Dr. Rajesh Kumar Prusty

### Assistant Professor

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[Google scholar link](#)

[FRP Composite Lab link](#)



### 1. Education

- Ph.D. (2014 – 17) in Metallurgical and Materials Engineering from [NIT Rourkela](#).
- M.E. (2011 – 13) in Materials Engineering from [IISc Bangalore](#) with CGPA **7.9 (Out of 8)** – Rank 1 (*Gold medalist*).
- B.Tech (2006 – 10) in Metallurgical and Materials Engineering from [NIT Rourkela](#) with CGPA **9.19 (Out of 10)** – Rank 1 (*Silver medalist*).
- Intermediate (10+2) (2005) in Science from [BJB Junior College, Bhubaneswar](#) (Council of Higher Secondary Education, Orissa) with **92.22%**.
- Matriculation (10<sup>th</sup>) (2003) from Saraswati Vidya Mandir, Puri (Board of Secondary Education, Orissa) with **91.73%** - Rank 1 (*Silver medalist*)

### 2. Research Summary

- No. of SCI journal articles published: 48                      No. of Books published: 02
- No. of Conference publications: 38                      No. of Book chapters published: 02
- h-index:              22 (Google Scholar)              19 (Scopus)              17 (Web of Science)
- Total citations: 12420 (Google Scholar)              1192 (Scopus)              922 (Web of Science)

### 3. Awards and Achievements

- Received Faculty advisor appreciation award from NIT Rourkela in 2022.
- **All India Rank 1** in Metallurgical Engineering GATE 2011.
- Awarded **scholarship** of ₹1,00,000 for pursuing higher study by [JSL Stainless Ltd](#), Hisar , India.
- Awarded **K K Malik** award for being the **best graduate** from Materials Engineering (M.E.), [IISc, Bangalore](#) 2011-13 batch.
- Awarded **Silver Medal** for being the **first rank** holder from Metallurgical & Materials Engineering (B.Tech.), [NIT, Rourkela](#) 2006-10 batch.

- Secured a SGPA of **8/8** in 1st Semester during M.E. at [IISc, Bangalore](#).
- Secured a SGPA of **10/10** in 8th Semester during B.Tech. at [NIT, Rourkela](#).
- Awarded **Silver medal** for being the first rank holder in matriculation exam from school.

#### 4. Regular Reviewer of

- Composites Science and Technology (Elsevier)
- Construction and Building Materials (Elsevier)
- Composites Part A: Applied Science and Manufacturing (Elsevier)
- Chemical Engineering Journal (Elsevier)
- Journal of Adhesion Science and Technology (Taylor & Francis)
- Journal of Applied Polymer Science (Wiley)
- Polymer Composites (Wiley)
- Steel and Composite Structures (Techno-Press)

#### 5. Current Research Interests

- Development of nano-phased FRP Composites
- CNT alignment in fibrous polymeric composites
- Carbon fiber surface modification by Electrophoretic deposition
- Development of Advanced Fiber Metal Laminates (FMLs) for structural applications
- Development of FRP composite for ballistic applications
- Recycling and reuse of FRP Composites
- Durability analysis of FRP composites in various harsh and hostile environments
- Study of in-service environmental temperature effects on FRP Composites
- Sea water durability of FRP Composites

#### 6. Sponsored Projects

- iv. **Project Title:** Development of effective technical solutions for recycling of industrial FRP wastes and end-of-life FRP components

**Funding Agency:** Tata Steel

**Duration:** December, 2021 to December, 2024

**Role:** Principal Investigator

**Status:** Continuing

- iii. **Project Title:** Environmental impacts on the Mechanical, Thermal and Electrical performance of CNT embedded fibrous polymeric composites: Effects of through thickness CNT alignment  
**Funding Agency:** Science and Engineering Research Board (SERB), Govt. of India.  
**Duration:** March, 2019 to September, 2022  
**Role:** Principal Investigator  
**Status:** Continuing
- ii. **Project Title:** Moisture uptake kinetics and its subsequent effect on mechanical performance of nano-phased fibrous polymeric composites.  
**Funding Agency:** Council of Scientific and Industrial Research (CSIR), Govt. of India.  
**Duration:** August, 2017 to August, 2020  
**Role:** Principal Investigator  
**Status:** Completed
- i. **Project Title:** Effect of Hygrothermal conditioning and cycling on CNT embedded GFRP composite: A Study on marine environment durability  
**Funding Agency:** Naval Research Board (NRB), DRDO, Govt. of India  
**Duration:** November, 2016 to November, 2019  
**Role:** Principal Investigator  
**Status:** Completed

## 7. Consultancy Projects

- **Project Title:** A study of FRP (focus on carbon, glass and polymer fiber reinforcements) composites for structural applications in modern India: Feasibilities and Opportunities.  
**Funding Agency:** TATA Steel.  
**Duration:** October, 2016 to October, 2018.  
**Role:** Co-consultant  
**Status:** Completed

## 8. Courses Teaching/Taught

- Nanostructured Materials – Theory (UG)
- Joining of Metals – Theory (UG)
- Composite Materials – Theory (UG & PG)
- Polymer and Composite Materials – Lab (UG)

- Seminar and Technical Writing – Lab (UG)
- Phase Transformation laboratory (PG)
- Product Development laboratory (UG)
- Molecular Modelling of materials deformation behavior (UG)
- Engineering Metallurgy (UG)

#### **9. Conference/Workshop/Short-term course organized**

- Coordinator of a training workshop on Application of XRD Technique in Materials Science and Engineering held at NIT Rourkela during August 22 – 28, 2022.
- Convener of a One Day Research Facility Training Program on "Hands-on experience in fabrication and characterization of FRP composites" held at NIT Rourkela during August 13, 2022.
- Coordinator of a short term course and workshop on Concepts to Commercialization of FRP Composites held at NIT Rourkela during August 8 – 12, 2022.
- Treasurer of 2<sup>nd</sup> International conference of Processing and Characterization of Materials (ICPCM) held at NIT Rourkela during December 12 – 14, 2019.
- Co-convener of 1<sup>st</sup> International conference of Processing and Characterization of Materials (ICPCM) held at NIT Rourkela during December 6 – 8, 2018.

#### **10. Invited Lectures**

- Delivered an invited lecture on "Fibre Reinforced Polymer Composites: An emerging alternative material for Structural Applications" organized by School of Mechanical Sciences Department of Polymer Engineering, B.S. Abdur Rahman Crescent Institute of Science and Technology on 17 May 2022.
- Delivered an invited talk on "An Introduction to Fiber Reinforced Polymer Composites" at The Indian Institute of Metals Rourkela Local Chapter webinar" online on 17<sup>th</sup> July 2022.
- Delivered an invited talk on "An Introduction to Fiber Reinforced Polymer Composite and their Mechanical Behaviour" in the short term course organized by MNIT Jaipur during 22 – 26 September 2020.
- Speaker of the customized short term course conducted by TATA Steel Ltd. (New Materials Business) for its executives on "FRP Composites: An Introduction from Definition to Development" during 17 – 18 May, 2018 at Kolkata.

- Delivered a keynote lecture at National seminar on “Polymer Nanocomposites for Engineering Applications” organized at NIT, Rourkela held on 14<sup>th</sup> March, 2015.
- Delivered a keynote lecture on “Failure and Fracture behavior of Composite Materials” in the short term course “Deformation Behaviour and Fracture of Engineering Materials: Experimental and Simulations” organized by Dept. of Metallurgical and Materials Engineering, NIT Rourkela on 13<sup>th</sup> December, 2018.
- Delivered a keynote lecture on “Introduction to FRP Composites: A prospective material for aerospace applications” in the short term course “Aero-craft Processes and Aero-Materials” organized by Dept. of Metallurgical and Materials Engineering, NIT Rourkela on 27<sup>th</sup> May, 2019.

### 11. Academic Experience

- Presently continuing as an **Assistant Professor** in Metallurgical and Materials Engineering dept. at [NIT, Rourkela](#) since March 2014.
- Served Mechanical Engineering dept., [KIIT University](#), Bhubaneswar as an **Assistant Professor** for 8 months during July 2013 – Feb 2014

### 12. Industrial Experience

- Served [JSL Stainless Ltd](#), Hisar, India as a Graduate Engineer Trainee (**GET**) for one year during July 2010- June 2011.

Responsibilities assigned during the job period:

- Costing.
- Analysis of casting defects and possible remedial measures.
- Optimization of processing parameters of Steel Melting Shop.
- Maximization of Chromium and Manganese recovery in Steel Melting Shop.
- Analysis of feasibility of new grade processing.

### 13. Past Research Experience

- Ph.D. thesis (2017): **Implication of CNT Fillers on Environmental Durability of GFRP Composites: An Evaluation of Microstructural Features and Mechanical Properties** at [NIT, Rourkela](#) under supervision of [Prof. B C Ray](#).

- Master's degree (2013): **Nanoindentation of Ni-gyroids** at [IISc, Bangalore](#) under supervision of [Prof. U Ramamurty](#) (*FNAE, FASc, FNA, FTWAS, Shanti Swarup Bhatnagar awardee-2011*).

#### 14. Other Administrative Responsibilities

- Working as Co-treasurer NIT Rourkela Alumni Association (NITRAA) since July 2022.
- Working as Joint Secretary of Indian Institute of Metals Rourkela Chapter since September 2021.
- Warden of G D Birla Hall of Residence at NIT Rourkela from July 1, 2020 to June 30, 2022.

#### 15. Books Published

2. B.C. Ray, **R.K. Prusty**, D. Nayak, Phase Transformations and Heat Treatments of Steels, CRC Press, Boca Raton, 2020. <https://doi.org/10.1201/9780429019210>.
1. B.C. Ray, **R.K. Prusty**, D.K. Rathore, Fibrous Polymeric Composites: Environmental Degradation and Damage, CRC Press, Boca Raton, 2018. <https://doi.org/10.1201/9780429506314>.

#### 14. Book Chapters Published

2. B.N.V.S.G.G. K, K.K. Mahato, **R.K. Prusty**, B.C. Ray, Challenges of Adhesively Bonded Joints and Their Advantages over Mechanical Fastening, in: Fail. Fibre-Reinf. Polym. Compos., CRC Press, 2021. <https://doi.org/10.1201/9781003128861>
1. A.O. Fulmali, S.K. Ramamoorthy, **R.K. Prusty**, Functionalization of Carbon Nanotube, in: J. Abraham, S. Thomas, N. Kalarikkal (Eds.), Handb. Carbon Nanotub., Springer International Publishing, Cham, 2021: pp. 1–41. [https://doi.org/10.1007/978-3-319-70614-6\\_63-1](https://doi.org/10.1007/978-3-319-70614-6_63-1).

#### 15. Publications in SCI Journals

48. B.N.V.S.G. Gupta K, S. Patnaik, B.C. Ray, R.K. Rai, **R.K. Prusty**, Elevated temperature mechanical behavior of nano Al<sub>2</sub>O<sub>3</sub> embedded interpenetrating polymer network/glass fiber composites, J. Appl. Polym. Sci. 139 (2022) e52991. <https://doi.org/10.1002/app.52991>.
47. Shubham, A. Jena, A.R. Balaboina, **R.K. Prusty**, B.C. Ray, Influence of alumina nanoparticles addition on the tribological behaviour of the random discontinuous carbon

- fibers reinforced epoxy composites, *Materialia*. 26 (2022) 101589. <https://doi.org/10.1016/j.mtla.2022.101589>.
46. Shubham, P. Bharti, **R.K. Prusty**, B.C. Ray, Tribological, Mechanical, and Thermal Behavior of Titanium Dioxide and Graphene Nanoplatelet Embedded Epoxy Based Hybrid Nanocomposite, *Polym. Sci. Ser. A.* (2022). <https://doi.org/10.1134/S0965545X22700328>.
45. A. Yadav, B.A. Nayak, A.O. Fulmali, **R.K. Prusty**, Synergetic impact of both fiber surface grafting and matrix modification by carbon nanotubes and functionalized carbon nanotubes on the flexural behavior of carbon fiber reinforced polymer composites: An assessment at cryo-, room-, and elevated- in situ temperature conditions, *J. Appl. Polym. Sci.* 139 (2022) e53104. <https://doi.org/10.1002/app.53104>.
44. Shubham, C.S. Yerramalli, C. Sumant, **R.K. Prusty**, B.C. Ray, Finite element modelling and experimentation of plain weave glass/epoxy composites under high strain-rate compression loading for estimation of Johnson-Cook model parameters, *Int. J. Impact Eng.* 167 (2022) 104262. <https://doi.org/10.1016/j.ijimpeng.2022.104262>
43. Shubham, **R.K. Prusty**, B.C. Ray, In-Situ Elevated Temperature Interlaminar Shear Response and Thermal Behavior of Graphene Nanoplatelet Reinforced Kevlar/Epoxy Laminated Composites, *Polym. Sci. Ser. B.* (2022). <https://doi.org/10.1134/S1560090422700166>.
42. Shubham, **R.K. Prusty**, B.C. Ray, High Strain-Rate Through-Thickness Compression Testing of Symmetrical Inter-ply Hybrid Polymer Composites Reinforced with Carbon/Glass and Carbon/Kevlar Fibers, *Trans. Indian Inst. Met.* (2022). <https://doi.org/10.1007/s12666-022-02619-0>.
41. P.K. Gangineni, B.N.V.S.G. Gupta K., S. Patnaik, **R.K. Prusty**, B.C. Ray, Recent advancements in interface engineering of carbon fiber reinforced polymer composites and their durability studies at different service temperatures, *Polym. Compos.* 43 (2022) 4126–4164. <https://doi.org/10.1002/pc.26716>.
40. S. Dasari, S. Lohani, **R.K. Prusty**, An assessment of mechanical behavior of glass fiber/epoxy composites with secondary short carbon fiber reinforcements, *J. Appl. Polym. Sci.* 139 (2022) 51841. <https://doi.org/10.1002/app.51841>.

39. P.K. Gangineni, S.S. Dash, B.N.V.S. Ganesh Gupta K, **R.K. Prusty**, B.C. Ray, Effect of Post-Cathodic EPD Acetone Washing of Carbon Fibres on the Mechanical Properties of Graphene Carboxyl Embedded CFRP Composites, *Trans. Indian Inst. Met.* (2022). <https://doi.org/10.1007/s12666-022-02551-3>.
38. B.N.V.S. Ganesh Gupta K, B. Sen, M.M. Hiremath, **R.K. Prusty**, B.C. Ray, Enhanced creep resistance of GFRP composites through interpenetrating polymer network, *Int. J. Mech. Sci.* 212 (2021) 106728. <https://doi.org/10.1016/j.ijmecsci.2021.106728>.
37. P.K. Gangineni, S. Patnaik, **R.K. Prusty**, B.C. Ray, Mechanical behavior of electrophoretically modified CFRP composites at elevated temperatures: An assessment of the influence of graphene carboxyl bath concentration, *J. Appl. Polym. Sci.* 138 (2021) 51365. <https://doi.org/10.1002/app.51365>.
36. S. De, P. N. Shivangi, S. Choudhury, A.O. Fulmali, B.C. Ray, **R.K. Prusty**, Effects of fiber surface grafting by functionalized carbon nanotubes on the interfacial durability during cryogenic testing and conditioning of CFRP composites, *J. Appl. Polym. Sci.* 138 (2021) 51231. <https://doi.org/10.1002/app.51231>.
35. A.O. Fulmali, B. Sen, B.A. Nayak, **R.K. Prusty**, Effect of repeated hydrothermal cycling on the durability of glass fiber/epoxy composites with and without carbon nanotube reinforcement, *Polym. Compos.* 42 (2021) 6160–6172. <https://doi.org/10.1002/pc.26293>.
34. P.K. Gangineni, S. Patnaik, B.N.V.S.G. Gupta K., **R.K. Prusty**, B.C. Ray, Interfacial behavior of graphene carboxyl-grafted carbon fiber reinforced polymer composites at elevated temperatures: Emphasis on the effect of electrophoretic deposition time, *Polym. Compos.* 42 (2021) 5893–5903. <https://doi.org/10.1002/pc.26269>.
33. S. Dasari, S. Lohani, P.K. Gangineni, **R.K. Prusty**, Effects of Cryogenic Aging on Flexural Behavior of Advanced Inter-ply Hybrid Fiber-Reinforced Polymer Composites, *Trans. Indian Inst. Met.* 74 (2021) 2171–2183. <https://doi.org/10.1007/s12666-021-02288-5>.
32. S. De, A.O. Fulmali, K.C. Nuli, **R.K. Prusty**, B.G. Prusty, B.C. Ray, Improving delamination resistance of carbon fiber reinforced polymeric composite by interface engineering using carbonaceous nanofillers through electrophoretic deposition: An assessment at different in-service temperatures, *J. Appl. Polym. Sci.* 138 (2021) 50208. <https://doi.org/10.1002/app.50208>.



33. S. Dasari, S. Saurabh, **R.K. Prusty**, Temperature and loading speed sensitivity of glass/carbon inter-ply hybrid polymer composites on tensile loading, *J. Appl. Polym. Sci.* 138 (2021) 49928. <https://doi.org/10.1002/app.49928>.
30. S. Gupta, **R.K. Prusty**, B.C. Ray, S. Pal, Strength degradation and fractographic analysis of carbon fiber reinforced polymer composite laminates with square / circular hole using scanning electron microscope micrographs, *J. Appl. Polym. Sci.* 138 (2021) 49878. <https://doi.org/10.1002/app.49878>.
29. A. Anand, S.K. Ghosh, A.O. Fulmali, **R.K. Prusty**, Enhanced barrier, mechanical and viscoelastic properties of graphene oxide embedded glass fibre/epoxy composite for marine applications, *Constr. Build. Mater.* 268 (2021) 121784. <https://doi.org/10.1016/j.conbuildmat.2020.121784>.
28. B.N.V.S. Ganesh Gupta K, M.M. Hiremath, B.C. Ray, **R.K. Prusty**, Improved mechanical responses of GFRP composites with epoxy-vinyl ester interpenetrating polymer network, *Polym. Test.* 93 (2021) 107008. <https://doi.org/10.1016/j.polymertesting.2020.107008>.
27. B.N.V.S. Ganesh Gupta K, M.M. Hiremath, **R.K. Prusty**, B.C. Ray, Development of advanced fiber-reinforced polymer composites by polymer hybridization technique: Emphasis on cure kinetics, mechanical, and thermomechanical performance, *J. Appl. Polym. Sci.* 137 (2020) 49318. <https://doi.org/10.1002/app.49318>.
26. A. Anand, S.K. Ghosh, **R.K. Prusty**, Effects of seawater absorption and desorption on the long-term creep performance of graphene oxide embedded glass fiber/epoxy composites, *Polym. Compos.* 41 (2020) 4861–4871. <https://doi.org/10.1002/pc.25758>.
25. **R.K. Prusty**, R.L. Narayan, M. Scherer, U. Steiner, V.S. Deshpande, N.A. Fleck, U. Ramamurty, Spherical indentation response of a Ni double gyroid nanolattice, *Scr. Mater.* 188 (2020) 64–68. <https://doi.org/10.1016/j.scriptamat.2020.07.011>.
24. S. Yandrapu, P.K. Gangineni, S.K. Ramamoorthy, B.C. Ray, **R.K. Prusty**, Effects of electrophoretic deposition process parameters on the mechanical properties of graphene carboxyl-grafted carbon fiber reinforced polymer composite, *J. Appl. Polym. Sci.* 137 (2020) 48925. <https://doi.org/10.1002/app.48925>.
23. S. Patnaik, P.K. Gangineni, **R.K. Prusty**, Influence of cryogenic temperature on mechanical behavior of graphene carboxyl grafted carbon fiber reinforced polymer

- composites: An emphasis on concentration of nanofillers, *Compos. Commun.* 20 (2020) 100369. <https://doi.org/10.1016/j.coco.2020.100369>.
22. A.O. Fulmali, B. Sen, B.C. Ray, **R.K. Prusty**, Effects of carbon nanotube/polymer interfacial bonding on the long-term creep performance of nanophased glass fiber/epoxy composites, *Polym. Compos.* 41 (2020) 478–493. doi: [10.1002/pc.25381](https://doi.org/10.1002/pc.25381).
21. R. Kattaguri, A.O. Fulmali, **R.K. Prusty**, B.C. Ray, Effects of acid, alkaline, and seawater aging on the mechanical and thermomechanical properties of glass fiber/epoxy composites filled with carbon nanofibers, *J. Appl. Polym. Sci.* 137 (2020) 48434. doi: [10.1002/app.48434](https://doi.org/10.1002/app.48434).
20. P.K. Gangineni, S. Yandrapu, S.K. Ghosh, A. Anand, **R.K. Prusty**, B.C. Ray, Mechanical behavior of Graphene decorated carbon fiber reinforced polymer composites: An assessment of the influence of functional groups, *Compos. Part Appl. Sci. Manuf.* 122 (2019) 36–44. doi:[10.1016/j.compositesa.2019.04.017](https://doi.org/10.1016/j.compositesa.2019.04.017).
19. S.S.R. Nomula, D.K. Rathore, B.C. Ray, **R.K. Prusty**, Creep performance of CNT reinforced glass fiber/epoxy composites: Roles of temperature and stress, *J. Appl. Polym. Sci.* 136 (2019) 47674. doi:[10.1002/app.47674](https://doi.org/10.1002/app.47674).
18. A. Anand, P. Banerjee, D. Sahoo, D.K. Rathore, **R.K. Prusty**, B.C. Ray, Effects of temperature and load on the creep performance of CNT reinforced laminated glass fiber/epoxy composites, *Int. J. Mech. Sci.* 150 (2019) 539–547. doi:[10.1016/j.ijmecsci.2018.09.048](https://doi.org/10.1016/j.ijmecsci.2018.09.048).
17. P.N. Harshita, D.K. Rathore, **R.K. Prusty**, B.C. Ray, Extrapolation of Mechanical Strengthening Effect in Nanoclay/Epoxy Nanocomposites to Elevated Temperature Environments, *Trans. Indian Inst. Met.* 71 (2018) 2015–2024. doi:[10.1007/s12666-018-1334-8](https://doi.org/10.1007/s12666-018-1334-8).
16. S.K. Ghosh, P. Rajesh, B. Srikavya, D.K. Rathore, **R.K. Prusty**, B. Chandra Ray, Creep behavior prediction of multi-layer graphene embedded glass fiber/epoxy composites using time-temperature superposition principle, *Compos. Part Appl. Sci. Manuf.* 107 (2018) 507–518. doi:[10.1016/j.compositesa.2018.01.030](https://doi.org/10.1016/j.compositesa.2018.01.030).
- 15 **R.K. Prusty**, D.K. Rathore, B.C. Ray, Water-induced degradations in MWCNT embedded glass fiber/epoxy composites: An emphasis on aging temperature, *J. Appl. Polym. Sci.* 135 (2018) 45987. doi:[10.1002/app.45987](https://doi.org/10.1002/app.45987).

14. **R.K. Prusty**, D.K. Rathore, B.C. Ray, Evaluation of the role of functionalized CNT in glass fiber/epoxy composite at above- and sub-zero temperatures: Emphasizing interfacial microstructures, *Compos. Part Appl. Sci. Manuf.* 101 (2017) 215–226. doi:[10.1016/j.compositesa.2017.06.020](https://doi.org/10.1016/j.compositesa.2017.06.020).
13. S.K. Ghosh, **R.K. Prusty**, D.K. Rathore, B.C. Ray, Creep behaviour of graphite oxide nanoplates embedded glass fiber/epoxy composites: Emphasizing the role of temperature and stress, *Compos. Part Appl. Sci. Manuf.* 102 (2017) 166–177. doi:[10.1016/j.compositesa.2017.08.001](https://doi.org/10.1016/j.compositesa.2017.08.001).
12. D.K. Rathore, **R.K. Prusty**, B.C. Ray, Mechanical, thermomechanical, and creep performance of CNT embedded epoxy at elevated temperatures: An emphasis on the role of carboxyl functionalization, *J. Appl. Polym. Sci.* 134 (2017). doi:[10.1002/app.44851](https://doi.org/10.1002/app.44851).
11. **R.K. Prusty**, S.K. Ghosh, D.K. Rathore, B.C. Ray, Reinforcement effect of graphene oxide in glass fibre/epoxy composites at in-situ elevated temperature environments: An emphasis on graphene oxide content, *Compos. Part Appl. Sci. Manuf.* 95 (2017) 40–53. doi:[10.1016/j.compositesa.2017.01.001](https://doi.org/10.1016/j.compositesa.2017.01.001).
10. **R.K. Prusty**, D.K. Rathore, S. Sahoo, V. Parida, B.C. Ray, Mechanical behaviour of graphene oxide embedded epoxy nanocomposite at sub- and above- zero temperature environments, *Compos. Commun.* 3 (2017) 47–50. doi:[10.1016/j.coco.2017.02.003](https://doi.org/10.1016/j.coco.2017.02.003).
9. D.K. Rathore, **R.K. Prusty**, S.C. Mohanty, B.P. Singh, B.C. Ray, In-situ elevated temperature flexural and creep response of inter-ply glass/carbon hybrid FRP composites, *Mech. Mater.* 105 (2017) 99–111. doi:[10.1016/j.mechmat.2016.11.013](https://doi.org/10.1016/j.mechmat.2016.11.013).
8. **R.K. Prusty**, D.K. Rathore, B.C. Ray, CNT/polymer interface in polymeric composites and its sensitivity study at different environments, *Adv. Colloid Interface Sci.* 240 (2017) 77–106. doi:[10.1016/j.cis.2016.12.008](https://doi.org/10.1016/j.cis.2016.12.008).
7. D.K. Rathore, B.P. Singh, S.C. Mohanty, **R.K. Prusty**, B.C. Ray, Temperature dependent reinforcement efficiency of carbon nanotube in polymer composite, *Compos. Commun.* 1 (2016) 29–32. doi:[10.1016/j.coco.2016.08.002](https://doi.org/10.1016/j.coco.2016.08.002).
6. M.J. Shukla, D.S. Kumar, D.K. Rathore, **R.K. Prusty**, B.C. Ray, An assessment of flexural performance of liquid nitrogen conditioned glass/epoxy composites with multiwalled carbon nanotube, *J. Compos. Mater.* 50 (2016) 3077–3088. doi:[10.1177/0021998315615648](https://doi.org/10.1177/0021998315615648).

5. **R.K. Prusty**, D.K. Rathore, B.P. Singh, S.C. Mohanty, K.K. Mahato, B.C. Ray, Experimental optimization of flexural behaviour through inter-ply fibre hybridization in FRP composite, *Constr. Build. Mater.* 118 (2016) 327–336. doi:[10.1016/j.conbuildmat.2016.05.054](https://doi.org/10.1016/j.conbuildmat.2016.05.054).
4. D.K. Rathore, **R.K. Prusty**, D.S. Kumar, B.C. Ray, Mechanical performance of CNT-filled glass fiber/epoxy composite in in-situ elevated temperature environments emphasizing the role of CNT content, *Compos. Part Appl. Sci. Manuf.* 84 (2016) 364–376. doi:[10.1016/j.compositesa.2016.02.020](https://doi.org/10.1016/j.compositesa.2016.02.020).
3. **R.K. Prusty**, D.K. Rathore, M.J. Shukla, B.C. Ray, Flexural behaviour of CNT-filled glass/epoxy composites in an in-situ environment emphasizing temperature variation, *Compos. Part B Eng.* 83 (2015) 166–174. doi:[10.1016/j.compositesb.2015.08.035](https://doi.org/10.1016/j.compositesb.2015.08.035).
2. G.R. Krishna, R. Devarapalli, **R. Prusty**, T. Liu, C.L. Fraser, U. Ramamurty, C.M. Reddy, Structure-mechanical property correlations in mechanochromic luminescent crystals of boron difluoride dibenzoylmethane derivatives, *IUCrJ.* 2 (2015). doi:[10.1107/S2052252515015134](https://doi.org/10.1107/S2052252515015134).
1. **R.K. Prusty**, P. Kuruva, U. Ramamurty, T. Thomas, Correlations between mechanical and photoluminescence properties in Eu doped sodium bismuth titanate, *Solid State Commun.* 173 (2013) 38–41. doi:[10.1016/j.ssc.2013.09.002](https://doi.org/10.1016/j.ssc.2013.09.002).

## 16. Conference Presentations & Publications

38. Shubham, C.S. Yerramalli, **R.K. Prusty**, B.C. Ray, Through-Thickness High Strain Rate Compressive Response of Glass/Epoxy-Laminated Composites Embedded with Randomly Oriented Discontinuous Carbon Fibers, in: K. Jonnalagadda, A. Alankar, N.J. Balila, T. Bhandakkar (Eds.), *Adv. Struct. Integr.*, Springer, Singapore, 2022: pp. 103–111. [https://doi.org/10.1007/978-981-16-8724-2\\_10](https://doi.org/10.1007/978-981-16-8724-2_10).
39. S.S. Dash, P.K. Gangineni, B.N.V.S.G.G. K, S. Dasari, **R.K. Prusty**, B.C. Ray, Evaluation of mechanical behaviour of graphene oxide grafted CFRP composites: a comparison of anodic and cathodic EPD, *Adv. Mater. Process. Technol.* 0 (2021) 1–9. <https://doi.org/10.1080/2374068X.2021.1945272>.
36. S. Mohanty, Shubham, **R.K. Prusty**, B.C. Ray, Investigation of Elastic Properties of Rutile Titanium Dioxide from First Principles, in: S. Pal, D. Roy, S.K. Sinha (Eds.), *Process.*

- Charact. Mater. Sel. Proc. CPCM 2020, Springer, Singapore, 2021: pp. 203–210. [https://doi.org/10.1007/978-981-16-3937-1\\_21](https://doi.org/10.1007/978-981-16-3937-1_21).
37. S. Lohani, S. Dasari, S.S. Dash, **R.K. Prusty**, B.C. Ray, An Assessment of Wettability of Glass/Epoxy Composites Modified with CNT and MLG, in: S. Pal, D. Roy, S.K. Sinha (Eds.), Process. Charact. Mater. Sel. Proc. CPCM 2020, Springer, Singapore, 2021: pp. 147–155. [https://doi.org/10.1007/978-981-16-3937-1\\_15](https://doi.org/10.1007/978-981-16-3937-1_15).
34. S. Dasari, S. Lohani, S. Sumit Dash, A. Omprakash Fulmali, **R. K. Prusty**, B. Chandra Ray, A novel study of flexural behavior of short glass fibers as secondary reinforcements in GFRP composite, Mater. Today Proc. 47 (2021) 3370–3374. <https://doi.org/10.1016/j.matpr.2021.07.161>.
35. A. Omprakash Fulmali, B. Arnimesh Nayak, B.N.V.S. Ganesh Gupta K, S. Dasari, **R. K. Prusty**, B. Chandra Ray, Effect of 1D carbon nano- tube and fiber reinforcement on the long-term creep performance of glass fiber/epoxy composite using the time-temperature superposition principle, Mater. Today Proc. 47 (2021) 3263–3268. <https://doi.org/10.1016/j.matpr.2021.06.451>.
33. S. Gupta, S. Dasari, S. Pal, **R.K. Prusty**, B.C. Ray, Assessment of open hole flexural strength and progressive damage mechanism of CFRP composite as a function of stacking sequence, Int. J. Mater. Prod. Technol. 62 (2021) 80–95. <https://doi.org/10.1504/IJMPT.2021.115202>.
32. S. Lohani, Shubham, **R.K. Prusty**, B.C. Ray, Effect of ultraviolet radiations on interlaminar shear strength and thermal properties of glass fiber/epoxy composites, Mater. Today Proc. 43 (2021) 524–529. <https://doi.org/10.1016/j.matpr.2020.12.028>.
31. B. Ganesh Gupta K, M.M. Hiremath, A.O. Fulmali, **R.K. Prusty**, B.C. Ray, Multimaterial laminated composites: An assessment of effect of stacking sequence on flexural response, Mater. Today Proc. 44 (2021) 141–145. <https://doi.org/10.1016/j.matpr.2020.08.547>.
30. S. Dasari, S. Saurabh, K.K. Mahato, **R.K. Prusty**, B. Chandra Ray, Mechanical properties of glass/carbon inter-ply hybrid polymer composites at different in-situ temperatures, Mater. Today Proc. 39 (2021) 1192–1197. <https://doi.org/10.1016/j.matpr.2020.03.555>.
29. K.C. Nuli, A.O. Fulmali, B. Sen, K.K. Mahato, **R.K. Prusty**, B.C. Ray, Synergetic Impact of carbon nanotube and/or graphene reinforcement on the mechanical performance of

- glass fiber/epoxy composite, in: Mater. Sci. Forum, Trans Tech Publ, 2020: pp. 284–290.  
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28. S. Dasari, S. Saurabh, S. Gupta, B.C. Ray, **R.K. Prusty**, Experimental amelioration of flexural behavior under cryogenic conditioning through inter-ply fiber hybridization in FRP composites, Mater. Today Proc. 27 (2020) 1618–1624.  
<https://doi.org/10.1016/j.matpr.2020.03.336>.
  27. K. Kumar Mahato, D. Kumar Rathore, K. Dutta, **R. K. Prusty**, B. Chandra Ray, Effect of severely thermal shocked nano-Al<sub>2</sub>O<sub>3</sub> filled glass fiber reinforced polymeric composites: An assessment on tensile, thermal and morphological behaviour, Mater. Today Proc. 33 (2020) 5521–5525. <https://doi.org/10.1016/j.matpr.2020.03.334>.
  26. S. De, A.O. Fulmali, P.N. Shivangi, S. Choudhury, **R.K. Prusty**, B.C. Ray, Interface modification of carbon fiber reinforced epoxy composite by hydroxyl/carboxyl functionalized carbon nanotube, Mater. Today Proc. 27 (2020) 1473–1478.  
<https://doi.org/10.1016/j.matpr.2020.02.970>.
  25. S. Patnaik, P.K. Gangineni, B.C. Ray, **R.K. Prusty**, Effect of graphene-based nanofillers addition on the interlaminar performance of CFRP composites: An assessment of cryo-conditioning, Mater. Today Proc. 33 (2020) 5070–5075.  
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  24. S. Patnaik, P.K. Gangineni, A. Panda, **R.K. Prusty**, B.C. Ray, Interlaminar performance of graphene carboxyl modified CFRP composites: Effect of cryogenic conditioning, Mater. Today Proc. 27 (2020) 1516–1521. <https://doi.org/10.1016/j.matpr.2020.03.166>.
  23. S. Saurabh, S. Dasari, B. Chandra Ray, **R. K. Prusty**, Mode I interlaminar fracture toughness improvement of the glass/epoxy composite by using multiscale composite approach, Mater. Today Proc. 33 (2020) 5328–5333.  
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  22. M.M. Hiremath, B.N.V.S. Ganesh Gupta K, **R.K. Prusty**, B.C. Ray, Mechanical and thermal performance of recycled glass fiber reinforced epoxy composites embedded with carbon nanotubes, Mater. Today Proc. 33 (2020) 5029–5034.  
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21. A. Jena, Shubham, **R.K. Prusty**, B.C. Ray, Mechanical and thermal behaviour of multi-layer graphene and nanosilica reinforced glass Fiber/Epoxy composites, *Mater. Today Proc.* 33 (2020) 5184–5189. <https://doi.org/10.1016/j.matpr.2020.02.879>.
20. B.A. Nayak, Shubham, **R.K. Prusty**, B.C. Ray, Effect of nanosilica and nanoclay reinforcement on flexural and thermal properties of glass fiber/epoxy composites, *Mater. Today Proc.* 33 (2020) 5098–5102. <https://doi.org/10.1016/j.matpr.2020.02.852>.
19. A. Yadav, B.N.V.S. Ganesh Gupta K, A.O. Fulmali, **R.K. Prusty**, B.C. Ray, Effect of cure kinetics and nanomaterials on glass fiber/vinyl ester composites: An assessment on mechanical, thermal and fracture morphology, *Mater. Today Proc.* 33 (2020) 4937–4941. <https://doi.org/10.1016/j.matpr.2020.02.683>.
18. B. Sen, A.O. Fulmali, B.N.V.S.G. Gupta K, **R.K. Prusty**, B.C. Ray, A study of the effect of carbon nanotube/nanoclay binary nanoparticle reinforcement on glass fibre/epoxy composites, *Mater. Today Proc.* 26 (2020) 2026–2031. <https://doi.org/10.1016/j.matpr.2020.02.440>.
17. B.N.V.S. Ganesh Gupta K, M.M. Hiremath, B. Sen, **R.K. Prusty**, B.C. Ray, Influence of loading rate on adhesively bonded Tin-glass/epoxy single lap joint, *Mater. Today Proc.* 26 (2020) 1850–1854. <https://doi.org/10.1016/j.matpr.2020.02.406>.
16. B.N.V.S. Ganesh Gupta K, M.M. Hiremath, A.O. Fulmali, **R.K. Prusty**, B.C. Ray, Investigation of adhesively bonded multi-material joints: An assessment on joint efficiency and fracture morphology, *Mater. Today Proc.* 27 (2020) 1180–1185. <https://doi.org/10.1016/j.matpr.2020.02.074>.
15. M.M. Hiremath, B.N.V.S. Ganesh Gupta K, B. Sen, **R.K. Prusty**, B.C. Ray, Effect of in-situ temperature variation on mechanical response of glass/vinyl ester composites, *Mater. Today Proc.* (2020). <https://doi.org/10.1016/j.matpr.2020.01.595>.
14. B.N.V.S. Ganesh Gupta K, A. Yadav, M.M. Hiremath, **R.K. Prusty**, B.C. Ray, Enhancement of mechanical properties of glass fiber reinforced vinyl ester composites by embedding multi-walled carbon nanotubes through solution processing technique, *Mater. Today Proc.* (2020). <https://doi.org/10.1016/j.matpr.2020.01.391>.
13. Shubham, **R. K. Prusty**, B. Chandra Ray, Mechanical modelling and experimental validation of woven composites, *Mater. Today Proc.* (2019). <https://doi.org/10.1016/j.matpr.2019.11.082>.



12. D.K. Rathore, **R.K. Prusty**, B.C. Ray, An Assessment of Mechanical Performance of CNF Modified Glass Fiber/Epoxy Composites under Elevated Temperatures, in: Mater. Sci. Forum, Trans Tech Publ, 2020: pp. 311–315. <https://doi.org/10.4028/www.scientific.net/MSF.978.311>
11. S. Yandrapu, P.K. Gangineni, S. De, B.C. Ray, **R.K. Prusty**, Effect of Bath Concentration during Electrophoretic Deposition on the Interfacial Behaviour of Hybrid CFRP Composites, in: Mater. Sci. Forum, Trans Tech Publ, 2020: pp. 304–310. <https://doi.org/10.4028/www.scientific.net/MSF.978.304>
10. K.K. Mahato, K.C. Nuli, K. Dutta, **R.K. Prusty**, B.C. Ray, Thermal shock effect of nano-TiO<sub>2</sub> enhanced glass fiber reinforced polymeric composites: An assessment on tensile and thermal behavior, in: Mater. Sci. Forum, Trans Tech Publ, 2020: pp. 277–283. <https://doi.org/10.4028/www.scientific.net/MSF.978.277>
9. A.O. Fulmali, R. Kattaguri, K.K. Mahato, **R.K. Prusty**, B.C. Ray, Effect of CNT addition on cure kinetics of glass fiber/epoxy composite, IOP Conf. Ser. Mater. Sci. Eng. 338 (2018) 012003. <https://doi.org/10.1088/1757-899X/338/1/012003>.
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6. B.P. Singh, D.K. Rathore, S.C. Mohanty, **R.K. Prusty**, B.C. Ray, In-situ Elevated Temperature Mechanical Performance of MWCNT/epoxy Nanocomposite, Sens. Transducers. 210 (2017) 17.
5. K.K. Mahato, D.K. Rathore, **R.K. Prusty**, K. Dutta, B.C. Ray, Tensile behavior of MWCNT enhanced glass fiber reinforced polymeric composites at various crosshead speeds, IOP Conf. Ser. Mater. Sci. Eng. 178 (2017) 012006. <https://doi.org/10.1088/1757-899X/178/1/012006>.



4. K.K. Mahato, M. Biswal, D.K. Rathore, **R.K. Prusty**, K. Dutta, B.C. Ray, Effect of loading rate on tensile properties and failure behavior of glass fibre/epoxy composite, IOP Conf. Ser. Mater. Sci. Eng. 115 (2016) 012017. <https://doi.org/10.1088/1757-899X/115/1/012017>.
3. S.C. Mohanty, B.P. Singh, K.K. Mahato, D.K. Rathore, **R.K. Prusty**, B.C. Ray, Water absorption behavior and residual strength assessment of glass/epoxy and glass-carbon/epoxy hybrid composite, IOP Conf. Ser. Mater. Sci. Eng. 115 (2016) 012029. <https://doi.org/10.1088/1757-899X/115/1/012029>.
2. M.J. Shukla, D.S. Kumar, K.K. Mahato, D.K. Rathore, **R.K. Prusty**, B.C. Ray, A comparative study of the mechanical performance of Glass and Glass/Carbon hybrid polymer composites at different temperature environments, IOP Conf. Ser. Mater. Sci. Eng. 75 (2015) 012002. <https://doi.org/10.1088/1757-899X/75/1/012002>.
1. D.S. Kumar, M.J. Shukla, K.K. Mahato, D.K. Rathore, **R.K. Prusty**, B.C. Ray, Effect of post-curing on thermal and mechanical behavior of GFRP composites, IOP Conf. Ser. Mater. Sci. Eng. 75 (2015) 012012. <https://doi.org/10.1088/1757-899X/75/1/012012>.

## 17. Thesis Supervision

- **Ph.D.**

<b>Pavan Kumar Gangineni</b> (516MM9013) – Awarded	Mechanical Behavior of Graphene Nanofiller Grafted Carbon Fiber Reinforced Polymer Composites	Co-Supervisor
<b>Srinivasu Dasari</b> (517MM1006) – Thesis submitted	Influence Of Temperature On Mechanical Performance Of Glass Fiber/Epoxy Composite With Continuous And Discontinuous Secondary Carbon Fiber Reinforcement	Supervisor
<b>Shubham</b> (518MM1004) – Thesis submitted	High Strain-Rate Compressive Behaviour Of Plain Weave Fiber/Epoxy Composites: Numerical Simulation And Experimentation	Co-Supervisor

<b>Abhinav Omprakash Fulmali</b> (518MM1008) – Advanced Stage	Environmental durability analysis of nanophased FRP composite: Emphasis on nanofiller functionalization and alignment	Supervisor
<b>BNVS Ganesh Gupta K</b> (518MM1005) – Advanced Stage	Development of advanced structural fiber metal laminates through polymer hybridization and nanofiller incorporation approaches	Co-Supervisor
<b>Bibhu Prasanna Sahoo</b> (919MM5079) – Literature Survey continuing	Multiscale FRP Composites with improved interfacial bonding for cryogenic applications	Supervisor
<b>Satyaroop Patnaik</b> (522MM6002) – Exploratory research work started	Development Of Effective Technical Solutions For The Recycling Of Industrial FRP Wastes	Supervisor
<b>Devalingam Santhosh Kumar</b> (922MM5001) – Course work	Interface engineering of FRP Composites through fiber modification route	Supervisor

• **PG: M.Tech/Dual degree Thesis**

S. No.	Name and Roll No.	Thesis Title	Year	Role	Others
27	Ashoktez Ramprasad Balaboina (220MM1627)	Tribological behavior of discontinuous carbon fiber reinforced epoxy composite with binary nano filler	2022	Supervisor	
26	Shubham Rameshrao Maske (220MM1087)	Study of anti-corrosion properties of graphene-coated steel substrate	2022	Supervisor	Prof. B C Ray (Co-supervisor)

25	Pankaj Yadav (220MM1445)	Enhancement in Mode-I, Mode-II interlaminar fracture toughness and flexural properties of glass/epoxy composites at ambient and elevated temperatures by using nanoclay	2022	Co-supervisor	Prof. B C Ray (Supervisor)
24	S P Santanu (717MM1022)	Using thermally recycled glass fibers obtained from industrial wastes as a potential reinforcement in GFRP composites to improve its mechanical properties	2022	Supervisor	
23	Soumya Sumit Dash (219MM1408)	Effect of fibre polarity during electrophoretic deposition of graphene oxide on carbon fibre and evaluation of mechanical behaviour of composite	2021	Supervisor	
22	Ritupurna Sahoo (716MM1117)	URABILITY ANALYSIS OF SINGLE LAP JOINT FRP COMPOSITES USING CARBON NANOTUBE REINFORCED EPOXY ADHESIVES AT DIFFERENT TEMPERATURES	2021	Co-supervisor	Prof. B C Ray (Supervisor)
21	Avadesh Yadav (218MM1257)	Mechanical properties of CNT embedded fiber reinforced polymer composite at various temperatures: A comparative analysis through different processing techniques	2020	Supervisor	Prof. B C Ray (Co-supervisor)
20	Hiremath Mritunjay M (218MM1253)	Mechanical Characterization of nano titania reinforced Fiber Metal Laminates for Structural Applications	2020	Co-supervisor	Prof. B C Ray (Supervisor)
19	Sushant Saurabh (218MM1479)	Enhancement in Mode I interlaminar fracture toughness of glass/epoxy composites by using multiscale composite approach	2020	Co-supervisor	Prof. B C Ray (Supervisor)
18	Satyaroop Patnaik (715MM1108)	Interlaminar performance of cryogenically conditioned CFRP composites modified by graphene based nanofillers via electrophoretic deposition	2020	Supervisor	Prof. B C Ray (Co-supervisor)

17	Bhaskar Sen (715MM1154)	Techniques to enhance the mechanical properties of carbon nanotube embedded glass fibre reinforced epoxy composites	2020	Co-supervisor	Prof. B C Ray (Supervisor)
16	Sagar Yandrapu (217MM1417)	Effect of bath concentration and current during electrophoretic deposition process on the properties of CFRP composite	2019	Supervisor	Prof. B C Ray (Co-supervisor)
15	N Jyoti Krishna (714MM1100)	Nano Silica hybridized Graphene Oxide: Suitability analysis for reinforcing FRP composites	2019	Supervisor	Prof. B C Ray (Co-supervisor)
14	Nuli Krishna Chaitanya (217MM1360)	Evaluation of mechanical, thermal properties and water uptake kinetics of Pristine and Functionalized Carbon nanotube incorporated glass fiber reinforced epoxy composite under different harsh environments	2019	Co-supervisor	Prof. B C Ray (Supervisor)
13	Soubhik De (714MM1131)	Interphase Modification of CFRP composite by Electrophoretic deposition by carbon based nanofillers and its impact at different service temperatures	2019	Co-supervisor	Prof. B C Ray (Supervisor)
12	Abhinav O.Fulmali (216MM1430)	Effect of CNT/CNT-COOH addition on Creep performance and water absorption behaviour of embedded glass fiber/epoxy composites	2018	Supervisor	Prof. B C Ray (Co-supervisor)
11	Kattaguri Rani (216MM1426)	Resistance of CNF modified glass fiber/epoxy composites towards various corrosive fluids	2018	Co-supervisor	Prof. B C Ray (Supervisor)
10	Abhijeet Anand (713MM1109) DUAL	Graphene oxide embedded GFRP composites: A feasibility study for Marine applications	2018	Supervisor	Prof. B C Ray (Co-supervisor)
9	Poulami Banerjee (713MM1132) DUAL	Development of multi-scale GFRP composites using Nano-silica functionalized Graphene oxide	2018	Co-supervisor	Prof. B C Ray (Supervisor)
8	Debaraj Sahoo (215MM1242)	Effect of Humid Ageing on the Durability of Functionalized CNT Embedded GFRP Composite	2017	Supervisor	Prof. B C Ray (Co-supervisor)

7	Pradeep Kumar Biswal (215MM1425)	Mechanical Performance of Glass/Carbon Hybrid Polymer Composites under Cryogenic Temperature and Humid Environments	2017	Co-supervisor	Prof. B C Ray (Supervisor)
6	Sohan Kumar Ghosh (712MM1117) DUAL	Flexural and creep performance of graphene oxide reinforced glass fiber/epoxy composite at elevated temperatures	2017	Supervisor	Prof. B C Ray (Co-supervisor)
5	Sai Seetha Ram Nomula (712MM1168) DUAL	Durability assessment of Carbon nano tubes embedded glass fiber reinforced polymer composites at elevated temperature and different corrosive environments	2017	Co-supervisor	Prof. B C Ray (Supervisor)
4	Bhanu Pratap Singh (214MM2361)	Mechanical performance evaluation of carbon nanotube reinforced polymer nanocomposites at above ambient temperature environments	2016	Supervisor	Prof. B C Ray (Co-supervisor)
3	Sarat Chandra Mohanty (214MM1340)	Development of CNT modified GFRP composite and assessment of its elevated temperature mechanical performance	2016	Co-supervisor	Prof. B C Ray (Supervisor)
2	Devalingam Santhosh Kumar (213MM1470)	A new generation fibre reinforced polymer composites for low and cryogenic temperature applications	2015	Supervisor	Prof. B C Ray (Co-supervisor)
1	Meet Jayesh Shukla (213MM1474)	Elevated temperature performance of hybrid polymer composites	2015	Co-supervisor	Prof. B C Ray (Supervisor)

- **B.Tech Thesis**

S. No.	Name and Roll No.	Thesis Title	Year	Role	Others
26	Tanaya Sahoo (118MM0546)	Flexural behavior of polymer nanocomposites with aligned carbon nanofibres	2022	Supervisor	
25	Baishakh Mishra (118MM0531)	Tensile Performance of Glass Fiber/Epoxy Laminated Composite after Drop Weight Impact	2022	Supervisor	

24	Biswajeet Prusty (118MM0756)	INFLUENCE OF THE INTERPHASE PROPERTIES ON THE UNIDIRECTIONAL GLASS FIBRE/EPOXY COMPOSITE UNDER SINGLE PARTICLE IMPACT: A FINITE ELEMENT MICROMECHANICAL APPROACH	2022	Co-supervisor	
	Mridul Totla (118MM0785)				
23	Shiny Lohani (117MM0619)	Mechanical Behavior of Glass/Epoxy composites modified with MWCNT and MLG	2021	Supervisor	
22	B Arnimesh Nayak (117MM0629)	Effect of Matrix Modification and Alignment Techniques on the mechanical properties of FRP Composite	2021	Supervisor	
21	Supreet Mohanty (117MM0626)	Investigation of Elastic Properties of Titanium Dioxide from First principles	2021	Supervisor	
20	Bandi Manohar (117MM0622)	Effect of Aluminium Powder Addition on the Thermal Behaviour of Short Carbon Fibre Reinforced Epoxy Composites	2021	Supervisor	
19	Ankush Gautam (117MM0688)	Effect of Cure Parameters on Vinyl ester Polymer	2021	Co-supervisor	Prof B C Ray (Supervisor)
18	Lavudya Saikiran (116MM0545)	FRP STRENGTHENED STEEL STRUCTURES	2020	Supervisor	Prof B C Ray (Co-supervisor)
17	Kathula Padma Nayani (116MM0536)	Mechanical Characterisation of Adhesively Bonded Lap Joints: An Assessment on Adhesive Types and Testing Temperature	2020	Co-supervisor	Prof B C Ray (Supervisor)
16	P.N.Shivangi (115MM0476)	Experimental investigation on the effect of nano-fillers on the carbon fibre modified through Electrophoretic deposition	2019	Supervisor	Prof B C Ray (Co-supervisor)

15	Vinit Kumar Agarwalla (115MM0477)	Assessment of severely thermal shock conditioning of nano TiO <sub>2</sub> enhanced glass fiber/epoxy composites at various loading rate	2019	Supervisor	Prof B C Ray (Co-supervisor)
14	Shashwat Alok (115MM0657)	Fabrication of Single Lap Joint and determination of the effect of adhesive thickness on the lap shear strength of the joint	2019	Supervisor	Prof. B C Ray (Co-supervisor)
	Himanshu Shekhar (115MM0659)				
13	Saswat Choudhury (115MM0482)	Enhancement in Properties and Performance of advanced FRP composites to be used in structural applications through fiber modification	2019	Co-supervisor	Prof B C Ray (Supervisor)
12	Chaganti S Sarat Chandra(114MM0642)	Effect of Hydrothermal cycling on mechanical properties of Glass fibre/Epoxy composites with and without CNT	2018	Supervisor	Prof. B C Ray (Co-supervisor)
	Ganesh Arepalli(114mm0500)				
11	Soubhagya Kumar Nayak (114MM0263)	Effect of Freeze-thaw cycling on properties of CNT reinforced glass-epoxy composite	2018	Co-supervisor	Prof. B C Ray (Supervisor)
	Ankit Adarsha Patra (114MM0264)				
10	Akula Gayatri Sri Anjani (113MM0435)	Effect of Loading Rate and Temperature on Mechanical Performance of CNT Modified Glass Epoxy Fiber Reinforced Composite	2017	Supervisor	Prof. B C Ray (Co-supervisor)
	Arunesh Kumar Pandey (113MM0456)				
9	Dipesh Divyanshu (113MM0443)	Cryogenic performance of Nano-Silica embedded Glass Fibre Reinforced Polymer composite	2017	Supervisor	Prof. B C Ray (Co-supervisor)
8	Ashika Agrawal (113MM0434)	Flexural and Creep behavior of CNF enhanced GFRP composites at different temperatures	2017	Co-supervisor	Prof. B C Ray (Supervisor)
	Bata Krishna Giri (113MM0445)				

7	Tanmay Mahendra Goswami (113MM0602) Summer	Effect of Nano-Silica reinforcement on mechanical behaviour of GFRP composites at different temperatures	2017	Co-supervisor	Prof. B C Ray (Supervisor)
6	Swastik Somaray Mashyal (112MM0407) Summer	Role of environmental temperature on the mechanical behaviour of 0.5 wt % carbon nano fiber modified epoxy nanocomposite and glass fibre reinforced composite	2016	Supervisor	Prof. B C Ray (Co-supervisor)
5	Sweta Sahoo (112MM0419)	Elevated Temperature Performance of Carbon Nanotube Modified Epoxy Nanocomposites	2016	Supervisor	Prof. B C Ray (Co-supervisor)
	Varsha Parida (112MM0413)				
4	Jyoti Prakash (112MM0387)	Role of environmental temperature on the mechanical behaviour of Nanoclay modified epoxy composite	2016	Co-supervisor	Prof. B C Ray (Supervisor)
	Philkhana Naga Harshita (112MM0499)				
3	Brajesh Ranjan (112MM0385)	Mechanical performance of epoxy with varying content of carbonaceous nano-filler at elevated temperature	2016	Co-supervisor	Prof. B C Ray (Supervisor)
2	Hem Shruti Bhardwaj (111MM0357)	Environmental Study of Nano-Filler Embedded Fiber Reinforced Polymer Composite	2015	Co-supervisor	Prof. B C Ray (Supervisor)
	Prangya Paramita Sahoo (111MM0378)				
1	Abhisek Agrawalla (111MM0264)	Durability Assessment of Multiwalled Carbon-Nanotubes Modified Advanced Fibrous Polymeric Composite in Different Marine Environment	2015	Co-supervisor	Prof. B C Ray (Supervisor)
	Namrata Keshri (111MM0365)				