. **Academic Contribution / Recognition**

Supervision of Doctoral Studies

1. Influence of Minor Addition on The Shape Memory Effete of Some Copper Alloys (awarded).
2. Studies on The Mechanically Induced Amorphisation of Al Based Alloys and The Concerned Mechanisms (awarded).
3. Improvement of Mechanical Properties of Some Cu Added TI, B Microalloyed Dual Phase Steels For Automobile and Naval Applications (awarded).
4. Studies on the magnetic behaviour of some Cu-Ni-Co-Fe alloys (awarded).
5. Development of high strength bainitic steel (awarded)
6. A study on the effect of deformation on the performance of Ti-(49 at.% Ni) alloy. (awarded).
7. Structure-property correlation of Al alloys using soft computing technique (awarded).
8. Study on Cryogenic Deformation of copper. (awarded)
9. Development of high strength bainitic/martensitic-austenitic steels. (awarded).
10. Development of conducting polymer composites (awarded).
11. Mechanical alloying of immiscible systems by ternary additions (Submitted).

Projects completed as Principal Investigator/Co-Investigator:

1. University grant commission (UGC) - Development of a web based educational package for the study of surface and interfaces of material - 2001- 2.5 years - 3.65 lakhs

2. Council of Scientific and Industrial Research (CSIR) - Development of particulate dispersed metal matrix composites by thermal treatment of mechanical alloyed precursor – 2002 - 3 years - 5.79 lakhs

3. Indian Space Research Organization (ISRO)-Development of Nanocrystalline Al2O3 dispersed Cu – Matrix Composites-2004-3 years-9.0 lakhs

5. All India Council of Technical Education (AICTE) (As Co-PI) - Development of a Novel and Affordable Low Alloy Steel for Wear and Shock-resistant Applications – 2007 – 3 years - 8.0 lakhs

6. Nano Science and Technology Initiative, DST (As Co-PI) - Microscopic Investigation of Luminescence and Mechanical Properties of Nanostructured Porous Silicon - 2007 – 3 years - 69.0 lakhs

7. Tata Steel, Jamshedpur-Development of High Strength Martensite/Bainite – Austenite steels - 2007 - 2 years - 9.5 lakhs

8. Ministry of Steel, GoI, Development of Low Carbon High Strength Multiphase Steels (National facility for augmentation of expertise in steel research) (As Co-PI), Rs. 628.0 lakh.

Awards

1. Eminent Engineer, 2014, The Institution of Engineers (India).
2. MRSI Medal-2014
3. Metallurgist of the year, 2013, Ministry of Steel (GoI).
4. Metallurgical and Materials Division Medal, The Institution of Engineers (I), 2007.
5. Commonwealth Academic Staff Fellowship Award, 2004.
6. Metallurgical and Materials Division Medal, The Institution of Engineers (I), 2003.
7. Metallurgical and Materials Division Medal, The Institution of Engineers (I), 2002.
8. Guest Scientist at the University of Ulm under the financial supports from the Deutsche Forschung Gemeinschaft (G. W. Leibniz program Fe 313/11-1).
9. Best paper prize, at the 51st Annual Technical Meeting of the Indian Institute of Metals, Nov. 14-17, 1997, held in Jamshedpur, India.
10. Fellowship under the Quality Improvement Programme by All India Council of Technical Education.

Professional Membership

Life member, Indian Science congress Association

Member, Institute of Indian Foundrymen

Life Member, Indian Institute of Metal

Member, Institute of Engineers (I)

Member, ISTE

Member, Material Research Society of Indian

Publication

1. B. Mondal, S. Chabri, G. Sardar, N. Bhowmik, A. Sinha, P. P. Chattopadhyay, Magnetic and mechanical properties of Cu (75wt%)–316L grade stainless steels synthesized by ball milling and annealing, Journal of Magnetism and Magnetic Materials 381 (2015) 14-20.

2. A. Hazra, B. Bhowmik, K. Dutta, P. P. Chattopadhyay, P. Bhattacharyya Stoichiometry, Length, and Wall Thickness Optimization of TiO_2 Nanotube Array for Efficient Alcohol Sensing, ACS applied materials and interfaces, 7(18) (2015) 9336–9348

3. K. Dutta, P. P. Chattopadhyay, C. W. Lu, M. S. Ho, P. Bhattacharyya, A Highly Sensitive BTX Sensor based on Electrochemically Derived Wall Connected TiO_2 Nanotubes, Applied Surface Science, 354 (2015) 353–361

4. S. Chakraborty, S. Datta, S. K. Mukherjea, P. P. Chattopadhyay, Cooling Profile Analysis of Hot Strip Coil using Finite Volume Method. Applied Mechanics and Materials, 789-790 (2015) 494-500.

5. A. Sinha, G. G. Khan, B. Mondal, J. D. Majumdar, P. P. Chattopadhyay, Effect of Aluminum Coating on the Surface Properties of Ti-(~ 49 at. pct) Ni Alloy, Metallurgical and Materials Transactions B 46 (4) (2015) 1951-1958.

6. M. K. Tripathi, P. P. Chattopadhyay, S. Ganguly, Multivariate analysis and classification of bulk metallic glasses using principal component analysis,Computational Materials Science 107(2015) 79-87.

7. A. Patra, S. Ganguly, P. P. Chattopadhyay, S. Datta, Computational design and development of novel Al-Mg-Sc-Cr alloy, Multidiscipline Modeling in Materials and Structures 11 (3) (2015) 401-412.

8. S. Datta, M. Mahfouf, Q. Zhang, P. P. Chattopadhyay, N Sultana, Imprecise knowledge based design and development of titanium alloys for prosthetic applications,Journal of the mechanical behavior of biomedical materials 53 (2015) 350-365.

9. K. Dutta, B. Bhowmik, A. Hazra, P. P. Chattopadhyay, P. Bhattacharyya, An efficient BTX sensor based on p-type nanoporous titania thin films, Microelectronics Reliability 55 (3),(2015) 558-564.

10. G.. Anand, K.. Barai, R.. Madhavan P. P. Chattopadhyay, Evolution of Annealing Texture in Cryo-Rolled Copper, Materials Science Engineering A, 638 (2015) 114-120.

11. A. Hazra, P. P. Chattopadhyay, P. Bhattacharyya, Hybrid Fabrication of Highly Rectifying p-n Homojunction based on Nanostructured TiO_2, IEEE Electron Device Letters (IEEE),36 (5) (2015).

12. Subhas Ganguly, A. Patra, P. P. Chattopadhyay and S. Datta, New training strategies for neural networks with application to quaternary Al-Mg-Sc-Cr alloy design problems, Applied soft computing, 11(3) (2015).

13. B. N. Mondal, G. Sardar, D. N. Nath, P. P. Chattopadhyay, Ferromagnetic behavior of nanocrystalline Cu–Mn alloy prepared by ball milling, Journal of Magnetism and Magnetic Materials 371(2015)139-143.

14. H. Chakraborty, D. Ray, P. P. Chattopadhyay, Bulk and nano-mechanical behavior of silver and silver-CNT reinforced hybrid polymer composites, Polymer Composites, 2015 (DOI: 10.1002/pc.23452).

15. B. Mondal, S. Chabri, G. Sardar, N Bhowmik, A. Sinha, P. P. Chattopadhyay, Magnetic and mechanical properties of Cu (75wt%)–316L grade stainless steels synthesized by ball milling and annealing, Journal of Magnetism and Magnetic Materials 381 (2015) 14-20.

16. K. Dutta, P. P. Chattopadhyay, C. W. Lu, M. S. Ho, P. Bhattacharyya, A Highly Sensitive BTX Sensor based on Electrochemically Derived Wall Connected TiO_2 Nanotubes, Applied Surface Science, 354 (2015) 353–361

17. M. K. Tripathi, P .P. Chattopadhyay, S. Ganguly, Multivariate analysis and classification of bulk metallic glasses using principal component analysis,Computational Materials Science 107(2015) 79-87.

18. A. Patra, S. Ganguly, P. P. Chattopadhyay, S. Datta, Computational design and development of novel Al-Mg-Sc-Cr alloy, Multidiscipline Modeling in Materials and Structures 11 (3) (2015) 401-412.

19. S. Datta, M. Mahfouf, Q. Zhang, P. P. Chattopadhyay, N. Sultana, Imprecise knowledge based design and development of titanium alloys for prosthetic applications,Journal of the mechanical behavior of biomedical materials 53 (2015) 350-365.

20. Subhas Ganguly, A. Patra, P. P. Chattopadhyay and S. Datta, New training strategies for neural networks with application to quaternary Al-Mg-Sc-Cr alloy design problems, Applied soft computing, 11(3) (2015).

21. A. Hazra, B. Bhowmik, K. Dutta, V. Manjuladevi, R. K. Gupta, P. P. Chattopadhyay, P. Bhattacharyya, Structural and Optical Characterizations of Electrochemically Grown Connected and Free Standing TiO_2 Nanotube Array, Journal of Electronic Materials, 43(9) (2014)3229-3235.

22. H. Chakraborty, D. Ray, P. P. Chattopadhyay, Mechanical and tribological behavior of alumina and alumina-CNT reinforced hybrid unsaturated polyester composites, Polymer Composites, 2014 (DOI: 10.1002/pc.23329).

23. N. Sultana, S. Sikdar (Dey), P. P. Chattopadhyay, and S. Datta, Informatics based design of prosthetic Ti alloys, Materials Technology: Advanced Biomaterials 29(B1) (2014)B69.

24. G. Anand, Partha Dey, P.J.J. Kok, Debalay Chakraborty, Partha Protim Chattopadhyay, Architechtured Microstructures in Steel, Material Science and Technology, 2014, Vol 30 (9) 1086-1093.

25. A. Hazra, B. Bhowmik, K. Dutta, V. Manjuladevi, R. K. Gupta, P.P. Chattopadhyay,P. Bhattacharyya, Formation Mechanism of Anodically Grown Free-standing TiO_2 Nanotube Array under the Influence of Mixed Electrolytes, Science of Advanced Materials, 6 (2014) 714. .

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33. Gautam Anand, Arijit Sinha and **Partha Protim Chattopadhyay**, On the plasticity of interstitial free steel subjected to cryogenic rolling followed by annealing, *Materials and Manufacturing Processes* **43** (2013) 242-248.

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38. Himel Chakroborty**,** Arijit Sinha**,** Nillohit Mukherjee, Dipa Ray and **Partha Protim Chattopadhyay**, A Study on nanoindentation and tribological behavior of multifunctional ZnO/PMMA nanocomposite, *Materials Letters* **93** (2013) 137-140.

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40. S.K.Ghosh, Shikhar, P.Mallick and **P. P. Chattopadhyay**, Influence of Mechanical Deformation and Annealing on Kinetics of Martensite in a Stainless Steel, *Materials and Manufacturing Processes* **28** (2013) 249-255.

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43. K. Barai, C.S. Tiwary, **P.P. Chattopadhyay**, K. Chattopadhyay, Synthesis of free standing nanocrystalline Cu by ball milling at cryogenic temperature, *Materials Science and Engineering A* **558** (2012) 52.

44. Himel Chakraborty, Arijit Sinha, Nillohit Mukherjee, and **Partha Protim Chattopadhyay**, Exfoliated graphite reinforced PMMA composite: A study on nanoindentation and scratch behavior, *Journal of Nanotechnology*, doi:10.1155/2012/940516.

45. A.Sinha and **P. P. Chattopadhyay**, Nanomechanical response of martensite in Ti-(~49 at. %) Ni alloy, *Materials Science and Engineering A* **552** (2012) 540.

46. B.N. Mondal, S. Chabri, A. Basumallick, **P.P. Chattopadhyay**, Influence of ternary addition of transition elements (Cr, Si and Mn) on the microstructure and magnetic properties of nano-structured Cu–Co alloy, *Journal of Magnetism and Magnetic Materials* **324** (2012) 2776.

47. B.N.Mondal, R.Bhattacharyay, D.N.Nath, **P. P. Chattopadhyay**, Magnetic response of Cu (25 wt.%)-316 grade stainless steel processed by ball milling, *Journal of Non-Crystalline Solids* **358** (2012) 810-813.

48. N.Bhowmik, S.K.Ghosh, A.Halder and **P.P.Chattopadhyay**, Low carbon high manganese bainitic steel, *Materials Science and Technology* **28** (2012) 282-287.

49. S.K.Ghosh, P.Mallick and **P. P. Chattopadhyay**, Effect of Cold Deformation on Phase Evolution and Mechanical Properties in an Austenitic Stainless Steel for Structural and Safety Applications, *Journal of Iron and Steel Research International* **19** (2011) 63-68.

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56. S.K.Ghosh,P.Mallick and **P.P.Chattopadhyay**,Effect of reversion of strain induced martensite on microstructure and mechanical properties in an austenitic stainless steel, *Journal of Materials Science*, **46** (2011)3480.

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58. B.N. Mondal, A. Basumallick, **P. P. Chattopadhyay**, Correlation of microstructure and magnetic properties in Cu-Co-Ni alloys, Materials Science and Engineering B,**166** (2010) 174.

59. S. K. Ghosh, N. Bhowmik, A. Haldar and **P. P. Chattopadhyay,** Effects of Cu addition on the synergistic effects of Ti - B in thermo mechanically processed low carbon steels, *Materials Science and Engineering A*, **527** (2010) 1082.

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61. A. Patra, S. Ganguly, M.S. Kaiser, **P.P. Chattopadhyay** and S. Datta: Effect of Quaternary Zirconium Addition on Mechanical Properties of Al -6Mg-Sc (0.2-0.6 wt %) Alloy Studied by ANN Technique, *Int. J. Mechatronics and Manufacturing Systems*, **3** (2010) 144.

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64. D. Das, S. Banerjee and **P. P. Chattopadhyay**, Correlation of microstructure with mechanical properties of high-martensite dual-phase steel, *International Journal of Materials Science*, **4** (2009) 419.

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