RESUME

## Name: Dr. Prasanta Kumar Rout

## Designation: Assistant Professor

**Address:** Department of Material Science and Engineering, Tripura University, (*Central University*), Suryamaninagar, Tripura-799022, India

**Specialization:** Powder Processing ofCeramics

Powder Metallurgy

Corrosion Engineering

Composite materials

Industrial solid waste utilization

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**Academic Qualification**

* **PhD**, Metallurgical and Materials Engineering (*NIT,Durgapur*)
* **M.Tech**, Materials Science and Engineering, (*IIT,Kharagpur*)
* **B. Tech**, Ceramic Engineering, (*NIT,Rourkella*)

**Employment Records**

* **Assistant Professor** at Tripura University, Tripura (*29.6.2016 – Till date*)
* **Lecturer** at Central Institute of Plastic Engineering and Technology (CIPET), Bhubaneswar, Odisha. (*14.8.2015 – 25.6.2016*)
* **Assistant Professor** at Gandhi Institute of Engineering and Technology (GIET), Gunupur, Odisha. (*19.7.2014 – 30.7.2015*)
* **Project Assistant** at CSIR-Institute of Minerals and Materials Technology, Bhubaneswar. (0*2.07.2009 – 06.10.2010*)
* **Self-Employee (Co-Founder Member)** Ants Ceramics Pvt. Ltd., Nashik, Maharashtra, (0*8.08.2005 – 15.12.2008*)

**Course taught**

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| * Corrosion and Degradation of Materials |
| * Materials Science and Engineering |
| * Metal Working and Testing of Materials |
| * Materials for Advance Application |
| * Advanced Casting and Welding |
| * Introduction to Physical Metallurgy and Engineering Materials |
| * Ceramic and Ceramic Technology |
| * Corrosion Science and Engineering |
| * Materials Deformation Process |
| * Physical Metallurgy |
| * Science and Technology of Ceramics |
| * Powder Metallurgy |

**Core area of expertise**

* Colloidal processing of oxide based ceramic for both high and low value added application.
* Development of construction/building materials by utilizing different industrial solid waste.
* Electrochemical and stress corrosion cracking (SCC) behaviour study of Al-Zn-Mg-Cu alloy systems.

**M. Tech thesis supervision detail**

* **Title:** Processing and Characterization of fly ash based construction materials made by geopolymerization technique.

**Status:** Completed.

**Student Name:** Mr. Dipankar Das (2016-2018)

**Institute:** Tripura University (A Central University)

* **Title:** Synthesis of cellulose based hydrogel for agricultural application.

**Status:** Completed.

**Student Name: Mr.** Dipankar Das (2016-2018)

**Institute:** Tripura University (A Central University)

* **Title:** Electrochemical behaviour study of Al-Zn-Mg-Cu alloy metal matrix composite (MMC).

**Status:** Ongoing.

**Student Name:** Mr. Sagar Kumar Deb (2017-2019)

**Institute:** Tripura University (A Central University)

* **Title:** Synthesis and characterizations of one part geopolymer cement.

**Status:** Ongoing.

**Student Name:** Mr. Satyajit Chaudhari (2017-2019)

**Institute:** Tripura University (A Central University)

**Research publication details**

Title: Influence of Aging Treatments on Alterations of Microstructural Features and Stress Corrosion Cracking Behavior of an Al-Zn-Mg Alloy.

Authors: Prasanta Kumar Rout, M.M. Ghosh, K.S. Ghosh

Journal: ***Journal of Materials Engineering and Performance*,** Volume: 24, Year: 2015, Page: 2792-2805.

Title: Microstructural, mechanical and electrochemical behaviour of a 7017 Al–Zn–Mg alloy of different tempers.

Authors: Prasanta Kumar Rout, M.M. Ghosh, K.S. Ghosh

Journal: ***Materials Characterization,*** Volume: 104, Year: 2015, Page: 49-60.

Title: Effect of solution pH on stress corrosion cracking behaviour of a 7150 Al-Zn-Mg-Cu alloy.

Authors: Prasanta Kumar Rout, M.M. Ghosh, K.S. Ghosh

Journal: ***Materials Science and Engineering A*,** Volume: 604, Year: 2014, Page: 156-165.

Title: Improvement of stress corrosion cracking (SCC) resistance of a 7150 Al-Zn-Mg-Cu alloy by retrogression and reageing (RRA) treatment.

Authors: Prasanta Kumar Rout, M.M. Ghosh, K.S. Ghosh

Journal: ***Advanced Materials Research*,** Volume: 984-985, Year: 2014, Page: 529-535.

Title: Effect of interrupted ageing on stress corrosion cracking (SCC) behaviour of an Al-Zn-Mg-Cu alloy.

Authors: Prasanta Kumar Rout, M.M. Ghosh, K.S. Ghosh

Journal: ***Procedia Materials Science*,** Volume: 5, Year: 2014 Page: 1214-1223.

Title: Aging and electrochemical behaviour of 7017 Al-Zn-Mg alloy of various tempers.

Authors: Prasanta Kumar Rout and K.S. Ghosh

Journal: ***Materials Science Forum*,** Volume: 710, Year: 2012, Page: 665-670.

Title: Production of Geopolymer Based Construction Material from Pond Ash: An Industrial Waste

Authors: Muktikanta Panigrahi, Pradeep Kumar Rana, Ajaya Kumar

Pradhan, **Prashant Kumar Rout**, Asish Kumar Samal, Sanjeev Gupta and Mv Basanta Kumar

Conference: Proceedings **of 19th Int. Conf. on Nonferrous Metals-**

**2015, Eds. B.K.Satpathy, Abhilash, I.N.Bhattacharya,**

Page: 190-202.

Title: Innovative process in manufacture of cold setting building brick from mining and industrial waste.

Authors: S.D. Muduli, **P.K. Rout**, S. Pany, S.M. Mustakim, B.D. Nayak, B.K. Mishara

Conference: Mine TECH 10**, The Indian Mining & Engineering Journal**

Page: 127-130.

Title: Effect of microstructural features on stress corrosion cracking behaviour of 7017 and 7150 aluminium alloy

Authors: **Prasanta Kumar Rout** and K.S. Ghosh

Journal: ***Materials Today: Proceedings,*** Volume: 5, Year: 2018,

Page: 2391-2400.

Title: Effect of high temperature pre-precipitation ageing on stress

Corrosion cracking behaviour of a 7150 Al-Zn-Mg-Cu alloy

Authors: **Prasanta Kumar Rout** and K.S. Ghosh

Conference: ***NIGIS \* CORCON 2015 conference \* Nov 19 – 21, 2015 \****

***Chennai***.

Title: Processing and characterization of fly ash based building materials by geopolymerization technique

Authors: Dipankar Das, **Prasanta Kumar Rout**

Seminar: Fourth International ***Symposium on Advances in Sustainable Polymers (ASP 17)***, at IIT, Guwahati, Year: 2018 Page: 209.

Title: Industrial solid waste to green materials: The changing mindset.

Authors: Dipankar Das, **Prasanta Kumar Rout**

Seminar: National conference on applied sciences and sustainable and evolving technologies ***(ASSET 2018-2019)*** at CIT Kokrajhar, Year: 2018, Page: 102.

**Sponsored funded Research grant**

Project Tile: Production of geopolymer construction materials from fly ash: An industrial waste

Funding Agency: Integrated Eco development research programme in the Himalayan region (IERP), Govt. of India.

Project Tile: Bioreactor based enhanced biorecovery of manganese from mining waste residues.

Funding agency: Department of Science and technology (DST), Govt. of

India.

**Honours And awards**

* Placed second position in INCUBIZ, Anveshan (III), contest by CIIE, Indian Institute of Management (IIM), Ahmadabad.
* Article published in The Econiomic Times on 6th June 2008 and 13th June 2008 about the achievement of owned formed company Ants Ceramics Pvt. Ltd. Nashik.
* Post graduate admission with MHRD scholarship