## **Curriculum Vitae**

Dr. Alok Prasad Das Assistant Professor, Department of Chemical & Polymer Engineering Tripura Central University, Agartala E-mail: alok1503@gmail.com Mob. No: +91 9178581814



## **Professional Experience: 8 years**

#### **Present Employment**

1. Assistant Professor, Department of Chemical & Polymer Engineering, Tripura Central University, Agartala, India

### **Previous Employment**

1. Assistant Professor July 2009- June 2016, at Center for Biotechnology, SOA University, Bhubaneswar, Odisha, India.

#### **Research Funding and Nationally Competitive Grants**

Serial No	Govt. of India Sanctioned Research Projects	Funding agency	Position	Amount & year
1	Bioreactor based enhanced biorecovery of manganese from mining waste residues [SP/YO/031/2016].	DST, Govt. of India	Principal Investigator	32.5Lakhs 2016-2019
2	Enhanced recovery of Manganese as Electrolytic Manganese Dioxide (EMD) from ferro manganese mine tailings through bioleaching	Mines, Govt.	Principal Investigator	30 Lakhs 2016-2019
3	Development of biosensors for rapid endotoxin detection in fluid systems used for the production of clinically applicable compounds [BT/PR3752/MED/32/208/2011]		Principal Investigator	17.33 Lakhs 2012-2014
4	Biomineralization of manganese from wastes and natural resources [BT/PR7454/BCE/8/949/2012]	DBT Govt. of India	Principal Investigator	20.42 Lakhs 2014-2017

5	Development of instrumentation methodology for rapid and noninvasive endotoxin detection in Urinary Tract Infection [IDP/MED/02/2013]	DST Govt. of India	Principal Investigator	52.57 Lakhs 2014-2016
6	Development of simple single step chromogenic methodology for rapid detection of food pathogens and toxins [BT/PR10426/PFN/20/783/2013]	DBT Govt. of India	Principal Investigator	11.68 Lakhs 2014-2016
	Total project cost as PI = 1 Corer 64.9 Lakhs			
7	Establishment of a culture collection centre in North East Region of India phase II	DBT Govt. of India	Co- Investigator	202880 Lakhs 2017-2020
8	Rapid detection of P. falciparum and P. vivax in human urine and saliva samples: a noninvasive approach for malaria diagnosis	DST, Govt. of India	Co- Investigator	42 lakhs 2014-2017

## **Educational Qualification:**

- PhD in Biotechnology (2013) work place CSIR-IMMT and registered at Siksha O Anusandhan University, Bhubaneswar.
- M.Tech in Chemical Engineering (2009) from National Institute of Technology, Rourkela, Odisha, India.
- M.Sc in Biotechnology (2006) from Fakir Mohan University, Balasore, Odisha, India.

### **Research Areas**:

- > Development of portable biosensors and rapid disease diagnosis instruments.
- > Bioleaching of low grade ores and waste metallic residues for mineral recovery.
- > Environmental resource recycling for bioenergy production.
- > Sustainable and renewable energy recourses engineering.

## **Patient Filed:**

 A process for miocrobial leaching of manganese. Indian patient Application No-201731027325. Date of Filling: 1-8-2017

#### Title of PhD /M. Tech/M. Sc thesis with name and address of Guide.

Degree	Title of Thesis	Guide	University
Ph. D	Bioleaching of Manganese (Mn) from low grade Manganese ore using indigenous microflora		SOA University &CSIR-IMMT , BBSR
M. Tech	Bioreduction based bioremediation of hexavalent chromium Cr (VI) through potential indigenous microbes	Dr. Susmita Mishra	NIT, Rourkela
M.Sc	Morphological and biochemical studies of Haemolymph of India Horseshoe Crab from Chandipur Beach, Odisha, of East India		F.M. University

## **Invited Speaker**

- 1. **A.P.Das.** Biomineral Recycling for Bioenery Applications. Workshop on Energy Production and Manaement, 19<sup>th</sup>-23<sup>rd</sup> March 2018, NIT Agartala.
- A. P. Das, Bio processing of manganese based mining and industrial residues for recovery of inorganic manganese. New Frontiers in Chemistry-from Fundamentals to Applications (NFCFA2015), 18<sup>th</sup>-19<sup>th</sup> December, 2015, BITS Pilani, Goa.
- 3. **A. P. Das,** Molecular phylogenetic of Indian horseshoe crab. National seminar on Biology, Biotechnology and Conservation of Indian Horseshoe crab, 29- 30<sup>th</sup>, Nov-2015, Amarda college, Balasore, Odisha.
- 4. A. P. Das, Chromogenic biosensors for detection of food pathogens and toxins, National conference on nutritional, functional and safety challenges of food, 26- 27, March, 2015 SRM University, Chennai.
- 5. A. P. Das, Non-invasive biosensing methodology for rapid detection of endotoxin in biological fluids, International Conference on Frontiers in Biological Sciences, 22nd-24th January, 2015, NIT Rourkela.
- 6. A. P. Das, Sensing the unseen through advanced biosensors. ISTE-SRM University sponsored Short Term Training Programme on "Recent Advances in Smart Materials" during 7<sup>th</sup> -12<sup>th</sup> July 2014, TACT, Bhubaneswar.
- A.P. Das, S. Ghosh, S. Mohanty. Manganese biomining for sustainable environmental resource cycling. Workshop on Microbiology in the development of sustainable technologies.
  <sup>26th</sup> July, 2015. Institute for Applied Environmental Biotechnology, Bhubaneswar, Odisha.

## Research Publications 2017

#### **Journal Publications**

- A.P. Das and S. Ghosh. Bioleaching of Manganese of mining waste materials. Materials Today Proceedings. 5, 2381-2390, 2017.
- S. Ghosh, B. Bal and A.P. Das. Enhancing Manganese recovery from low grade ores by using mixed culture of indigenously isolated bacterial strains. *Geomicrobiology journal*, 35, 242-246, 2017. (IF-1.4).
- M.S. Kumar, A.P. Das. Emerging nanotechnology based strategies for diagnosis and therapeutics of urinary tract infections: A review. *Advances in Colloid and Interface Science* 249:53-65, 2017 (IF- 9.44).
- 4. S. Ghosh and A.P. Das. Bioleaching of Manganese from mining waste residues using *Acinetobacter sp.* Geology, Ecology, and Landscapes. 1, 77-83, 2017.
- S. Mohanty, S. Ghosh, S. Nayak, A.P. Das. Bioleaching of manganese by *Aspergillus* sp. isolated from mining deposits. Chemosphere. 172, 302-309. 2017. (IF- 3.85).

## **Book Chapters**

- P. Biswal, A. Pal and A. P. Das. "Current trends and future prospective of prebiotics as therapeutic food" in Microbial Production of Food Ingredients and Additives. Elsevier Edited by Alexandru Grumezescu and Alina Maria Holban. 2017.
- B.Bal, S. Nayak and AP Das. "Recent Advances in Molecular Techniques for the Diagnosis of Foodborne Diseases" in Nanotechnology applications in food. 2017. Elsevier Edited by Alexandra Elena Oprea and Alexandru Grumezescu.

- B. Bal, B.P. Das and A. P. Das, Akbar John, B. Molecular phylogenetics and functional group analysis of mangrove horseshoe crab. International Conference on the Conservation of Asian Horseshoe Crabs (ICCA-HSC 2017) from 25-27 August 2017 at Bangkok, Thailand
- A.P. Das. Bioleaching of Manganese from mining waste materials. International Conference on Material Science (ICMS2017) held at Department of Physics, Tripura University, 16-18 February, 2017.

- P.Biswal, A. pal, A.P. Das. Controlled delivery of probiotic *lactobacillus rhamnosus* (MTCC 8712) in Carrageenan coated milk microsphere. International Conference on Material Science (ICMS2017) held at Department of Physics, Tripura University, 16-18 February, 2017.
- Bioremediation of industrial waste and effluents by micro algae. National seminar on the role of microalgae in waste water treatment. 21st February, 2017. SOA University, Bhubaneswar, Odisha, India.

#### <u>2016</u>

#### **Journal Publications:**

- 1. M.S. Kumar and A. P. Das Molecular identification of multi drug resistant bacteria from urinary tract infected urine samples. Microbial Pathogenesis, 98, (2016), 37-44. (IF- 1.79).
- Bal B, Armstrong P.B., Das A.P. (2016) Development of Indigenous Bio-sensing Methodology for Rapid and Low Cost Endotoxin Detection System. Sensor Network Data Communication S1: 005. doi:10.4172/2090-4886.S1-005.
- A. P. Das. (2016). Biosensors: The Future of Diagnostics. Sensor Network Data Communication http://dx.doi.org/10.4172/2090-4886.S1-e001
- S. Mohanty, S. Ghosh, S.Nayak and A.P. Das. Isolation, identification and screening of manganese solubilizing fungi from low grade manganese ore deposits. *Geomicrobiology journal*, 34, 309-316 2016. (IF-1.4).
- S. Ghosh, S. Mohanty, A. Akcil, L.B. Sukla and A.P. Das. A greener approach for resource recycling: Manganese bioleaching. (2016) Chemosphere 154 (2016) 628-639 (IF- 3.85)
- M.S. Kumar, S. Ghosh, S. Nayak, A.P. Das. Recent advances in biosensor based diagnosis of Urinary Tract Infection. Biosensors and Bioelectronics, 80, (2016), 497-510. (IF-6.4).
- A.S. Sanket S. Ghosh S. Mohanty, R. Kumar, A.P. Das. (2016). Identification of acidophilic Manganese (Mn) solubilizing bacteria from mining effluents and their application in mineral beneficiation, *Geomicrobiology journal*, 34, 1, 71-80. (IF-1.4).

#### **Book Chapters:**

1. A.P. Das, S. Ghosh, B. Bal and S. Nayak (2016). Advanced Nanosensors for detection food pathogens and toxins. Nanobiosensors (Nanotechnology in the Food Industry), Elsevier.

 S. Ghosh, S. Mohanty, L.B. Sukla and A.P. Das (2016) "Biomining: An Emerging Technology for Manganese Recovery and Recycling" in "Recent biotechnological applications in India". ENVIS Centre of Environmental biotechnology.

#### **Conference Publications:**

- S. Ghosh and A.P. Das. Toxicological effects of Manganese in environment and human health. Society of Environmental Toxicology and Chemistry Asia- Pacific 2016 Conference. 16-19 September, 2016. Singapore
- 2. M.S. Kumar and **A. P. Das.** Multidrug resistance pattern of E. coli isolated from UTI infected urine sample. 12<sup>th</sup> Indo- Australian Biotechnology conference, 7-9<sup>th</sup> August, 2016.
- S. Ghosh and A. P. Das. Manganese induced inflammatory response inside human body.12<sup>th</sup> Indo- Australian Biotechnology conference, 7-9<sup>th</sup> August, 2016.
- S. Ghosh, S. Nayak, L.B Sukla and A. P. Das. Enhancing Manganese recovery from low grade ores by using mixed culture of indigenously isolated bacterial strains. Biohydromet '2016, Falmoth UK, 21- 24 July 2016.

#### <u>2015</u>

#### **Journal Publications:**

- P. Biswal, A. Pal, A.P. Das. A New Light of Therapy for Non-Alcoholic Fatty Liver Disease: Symbiotic. Int. J. Pharm. Sci. Rev. Res., 33(1), (2015); 61, 326-336. Indexed in Scopus
- S. Ghosh S. Mohanty, S. Nayak, Lala Sukla, & A.P. Das. Molecular identification of indigenous manganese solubilising bacterial biodiversity from manganese mining deposits, *Journal of Basic Microbiology*. 55, (2015), 1-9. (IF-1.8). Indexed in Scopus
- 3. S. Ghosh & A.P. Das. Modified titanium oxide (TiO2) nanocomposites and its array of applications: A Review, *Toxicological & Environmental Chemistry*. 96, (2015). (IF-.825).
- A.P. Das, S. Ghosh, S. Mohanty & Lala Sukla, Consequences of Manganese Compounds: A Review, *Toxicological & Environmental Chemistry*. 96, (2015), 981-997. (IF-.825).

#### **Book Chapters:**

- A.P. Das, B. Bal and P.S. Mahapatra. (2015). Chromogenic biosensors for pathogen detection. Biological and Pharmaceutical Applications of Nanomaterials, CRC press, Taylor & Francis.
- A.P. Das, S. Ghosh, S. Mohanty, L.B. Sukla (2015). Advances in Manganese pollution and its bioremediation. Environmental Microbial Biotechnology. Soil Biology, Springer.

- A.P. Das, B. Bal and P.S. Mahapatra. (2015). Horseshoe crabs in modern day biotechnological applications. Changing global perspectives on biology. Conservation and management of horseshoe crabs, Springer.
- 4. A.P. Das, S. Ghosh, S. Mohanty, Lala Behari Sukla. (2015). Biometallurgy: Greener Technology for mineral recovery from Wastes. Applied and Industrial biotechnology.
- Susmita Mishra, Alok Prasad Das and Padma Seragadam. Isolation and characterization of nickel-resistant bacteria from electroplating waste. Global Environmental Issues: Empirical Evidences. Serials, 2010, xxii, ISBN: 81-8387-369-7.

- B. Bal and A. P. Das. Antimicrobial Activity of Algal Extract against Food Born Bacteria Bacillus Cereus. 2<sup>nd</sup> carbon sequestration seminar 2015.
- B. Bal, M.S. Kumar, S. Mohanty, S Ghosh and A. P. Das. Molecular characterization and phylogenetic analysis of food borne pathogen from degraded meat sample. NFCFA, 18<sup>th</sup>, 19<sup>th</sup> December, 2015, BITS Pilani, Goa.
- M.S. Kumar, S. Ghosh, B. Bal, S. Mohanty, A. P. Das. Isolation and characterization of uropathogens from urinary tract infected urine samples. NFCFA, 18<sup>th</sup>, 19<sup>th</sup> December, 2015, BITS Pilani, Goa.
- 4. S. Mohanty, S. Ghosh, B. Bal, S. Kumar and A. P. Das. Manganese resistant potential of fungal strain *Asperigilus oryzae*. NFCFA, 18<sup>th</sup>, 19<sup>th</sup> December, 2015, BITS Pilani, Goa.
- S. Ghosh, B. Bal, S. Mohanty, M.S. Kumar and A. P. Das. Solubilising Manganese nature's way: Bioleaching. NFCFA, 18<sup>th</sup>, 19<sup>th</sup> December, 2015, BITS Pilani, Goa.
- 6. S. Ghosh, S. Nayak, L.B Sukla and A. P. Das. Extracellular Polymeric Substances as possible chemosensors for identifying *Lysinibacillus* sp. as a Manganese biomining microorganism. International conference on New Horizons in Biotechnology. 22<sup>nd</sup> to 25<sup>th</sup> November, 2015, Trivandrum.
- 7. A.P. Das. Development of indigenous chromogenic biosensor for endotoxin detection from the lysate of Indian Horseshoe crab. 3rd International Workshop on the Science and Conservation of Horseshoe Crabs. June 15-19, 2015, Sasebo City, Japan.

- 8. S. Pati, B.P. Dash, A. Chatterji, A.P. Das, G.C. Biswal. Stock enhancement of Indian horseshoe crabs by adopting sea ranching practices. 3rd International Workshop on the Science and Conservation of Horseshoe Crabs. June 15-19, 2015, Sasebo City, Japan.
- A. P. Das, Chromogenic biosensors for detection of food pathogens and toxins, National conference on nutritional, functional and safety challenges of food, 26- 27, March, 2015 SRM University, Chennai.
- A. P. Das, Non-invasive biosensing methodology for rapid detection of endotoxin in biological fluids, International Conference on Frontiers in Biological Sciences, 22nd-24th January, 2015, NIT Rourkela.
- S. Ghosh, S. Mohanty, L. B. Sukla and A. P. Das, Screening of manganese solubilising activity of isolated indigenous bacterial strains, International Conference on Frontiers in Biological Sciences, 22nd-24th January, 2015, NIT Rourkela.
- S. Mohanty, S. Ghosh, L.B. Sukla and A. P. Das, Investigation of manganese resistant and solubilization activity of isolated fungal colonies, International Conference on Frontiers in Biological Sciences, 22nd-24th January, 2015, NIT Rourkela.
- B.Bal and A. P. Das, Assessment of the antimicrobial activity from the cell-free haemolymph of Indian horseshoe crab against *E. coli* through kinetic microplate method, International Conference on Frontiers in Biological Sciences, 22nd-24th January, 2015, NIT Rourkela.
- P. S. Mahapatra, M. Kanar, A. P. Das, Evaluation of antimicrobial activity of fresh water microalgae against *Escherichia coli*, International Conference on Frontiers in Biological Sciences, 22nd-24th January, 2015, NIT Rourkela.

### <u>2014</u>

#### **Journal Publications:**

- A.P. Das, P.S. Kumar, S. Swain, Recent Advances in Biosensor Based Endotoxin Detection, Biosensors and Bioelectronics. 51, (2014), 62-75. (IF- 6.4).Indexed in Scopus, Pubmed
- Mohanty S, Bal B and Das AP. Adsorption of Hexavalent Chromium onto Activated Carbon. Austin J Biotechnol Bioeng. (2014); 1(2): 5.

#### **Conference Publications:**

1. P.S Mahapatra, M.Kanar, B.Bal and **A.P Das**, Antimicrobial activity of fresh water microalgae. National symposium on emerging trends in biotechnology: present scenario and future dimension, 29th-30th March 2014, PG department of biotechnology, Utkal University.

## <u>2013</u>

#### **Conference Publications:**

- A.P. Das, S. Swain, N. Pradhan, L. B. Sukla. Bioremediation and bioleaching potential of multimetal resistant microorganism. International Mineral Processing Technology conference, December 10-12, 2013, CSIR-IMMT, Bhubaneswar.
- Bhubaneswari Bal, Abhisek Pal and Alok Prasad Das. Protective effects of a flavonoid against manganese-induced neurobehavioral aberrations in rats. International conference on Neuroscience, November 9-11, 2013, Ravenshaw University, Odisha.
- H.C. Ray, B. Bal, A.P. Das. Isolation and characterization of chromium resistance bacteria and its potential for chromium removal. 'Innovations in Science & Technology for Inclusive Development. *16th* Odisha Bigyan Congress. November 23-24, 2013. IOP, Bhubaneswar.
- A. P. Das, S. Swain. Algal Biosorption of toxic dye Methylene blue. International conference on Algal Biorefinery: A Potential source of Food, Feed, Biochemicals, Biofuels and Biofertilizers held in IIT Kharagpur during January 10-12, 2013.

#### <u>2012</u>

#### **Journal Publications:**

- **1. A.P. Das**, N. Pradhan, L.B. Sukla. Microbial recovery of manganese using *Staphylococcus* epidermidis. International Journal of Nonferrous Metallurgy, 1, (2012), 9-12. (IF- 0.38).
- A.P. Das, S. Swain, S. Panda, N. Pradhan, L. B. Sukla. Reductive Acid Leaching of Low Grade Manganese Ores. *Geomaterials*, 2012, 2, 70-72. (IF- 0.72).

- A. P. Das, S. Swain, S. Panda, N. Pradhan, L. B. Sukla. Investigation of Manganese bioleaching potential of microbial strains. AMI Conference, November 22-25, 2012, KIIT University.
- A.P. Das, N. Pradhan, L.B. Sukla, and S. Nayak. Fungal Biomining of Low Grade manganese Ore. XXVI International Mineral Processing Congress (IMPC 2012). September 24-28, 2012,

 A. P. Das. Biology and conservation of Indian horseshoe crab found in coastal region of Chandipur of Bay of Bengal. The 2<sup>nd</sup> Asian Regional Conference of Society for Conservation Biology. August 7-10, 2012, Bangalore.

#### <u>2011</u>

#### **Journal Publications:**

- 1. A.P. Das, L.B. Sukla, N. Pradhan, S. Nayak. Manganese biomining: A review. Bioresource Technology, 102 (16),(2011), 7381-7387.(IF- 5.47). Indexed in Scopus, Pubmed
- A.P. Das and S. Singh. Occupational health assessment of chromite toxicity among Indian miners. Indian J Occup Environ Med, 15 (2011), 10-17. Indexed in Scopus, Pubmed
- A.P. Das and A. Bissoyi. Computational approach for comparative phylogenetic analysis of isolated chromium resistant strain *Brevibacterium casei*. Journal of Engineering and Technology Research, 3(3) (2011). 82-87. Indexed in Chemical Abstract, Google Scholar
- 4. R. K Sahoo, A. Kuanar, R.K. Joshi, A.P. Das, S Nayak, E Subudhi. Anti-dermatophytic activity of eucalyptol rich turmeric somaclone oil against human pathogenic isolates. 2011. Journal of Medicinal Plants Research 5 (9), 1594-1597. Indexed in Scopus, Chemical Abstract

#### **Book Chapters:**

 A.P. Das, L. B. Sukla, N. Pradhan, S. Nayak. (2011). Isolation and characterization of manganese solubilising bacteria and its potential for manganese bioleaching. Biohydrometallurgical: biotechnology keys to open the door to use of mineral resources. ISBN: 978-7-5487-0356-3.

- A.P. Das, L.B. Sukla, Nilotpala Pradhan and Sanghamitra Nayak. Isolation and characterization of manganese solubilising bacteria from low grade manganese ore deposits of Odisha". International conference on microorganisms in environmental management and biotechnology (ICMEMB), 1-3July, 2011at Baraktullah University, Bhopal.
- A.P. Das, L.B. Sukla, Nilotpala Pradhan and Sanghamitra Nayak. Exploration and Exploitation of Novel Manganese Biomining Microorganism. International conference on microorganisms in environmental management and biotechnology (ICMEMB), July 1-3, 2011 at Baraktullah University, Bhopal.
- 3. R.K. Sahoo, T. D. Adhikary, U. Mohapatra, S.L. Jema, A.P. Das and E. Subudhi. Bioremediation of toxic heavy metals by *B. casei* isolated from mining effluent using

bioreactor. International conference on microorganisms in environmental management and biotechnology (ICMEMB), July 1-3, 2011 at Baraktullah University, Bhopal.

- A.P. Das, S.L. Jema T. D. Adhikary, and U. Mohapatra. Biomining: Technology For Biomineral Extraction at National Seminar on Trends in Microbial Bioremediation of Contaminated soil, OUAT on 24-25th sept, 2011.
- A.P. Das, T. D. Adhikary, and U. Mohapatra Role of multi metal resistance microorganism in Bioremediation at National Seminar on Trends in Microbial Bioremediation of Contaminated soil, OUAT on 24-25th sept, 2011.
- A.P. Das, T. D. Adhikary, and U. Mohapatra Poster Presentation on Multi Disease Targetting Drugs at International Conference on Tissue Engineering and Regenerative Medicine NIT Rourkela, 30th September -2nd October 2011.

#### <u>2010</u>

#### **Journal Publications:**

 A.P. Das and S. Mishra, Biodegradation of the Metallic carcinogen Hexavalent chromium Cr (VI) by an indigenously isolated bacterial strain. Journal of Carcinogenesis, (2010), 9:6. (IF-2.314)Indexed in Scopus, Pubmed.

#### **Conference Publications:**

1. **A.P. Das**and S. Mishra. Bioremediation of Hexavalent chromium [Cr (VI)] contaminated wastewater by a microbial strain of *Brevebacterium casei*. The 3rd IWA APYWP Conference, 21-24 Nov 2010, at National University of Singapore.

#### <u>2009</u>

#### **Journal Publications:**

- A.P. Das, S. Mishra and P. Seragadam (2009). Microbial remediation of hexavalent chromium from chromite contaminated mines of Sukinda Valley, Orissa. Journal of Environmental Research and Development, Volume 3 No. 4:1122-1127. (IF: 1.268). Indexed in Chemical
- A.P Das, S. Mishra. [Cr (VI)]: Yellow water Pollution and its Remediation. ENVIS Newsletter on Wetland Ecosystem. Vol. 5, No. 2, June 2009. ISSN 0972-3153.

#### **Conference Publications:**

1. A.P. Das and S. Mishra. Optimization of fermentation medium for production of chromium resistance bacteria. Advances in Environmental Engineering (AEE-09) at National Institute of Technology, November 14- 15, 2009.

## <u>2008</u>

### **Journal Publications:**

- 1. A.P. Das and S. Mishra (2008). Hexavalent Chromium (VI): Health hazards & Environmental Pollutant. *Journal of Environmental Research and Development*, 2: 386-392. (IF: 1.268).
- A.P. Das and S. Mishra. Hexavalent chromium reduction and 16S rDNA identification of bacteria isolated from a Cr (VI) contaminated site. *The Internet Journal of Microbiology*. 7:1, 2008, 1-6.

#### **Conference Publications:**

- A.P. Das and Susmita Mishra. Isolation & characterization of chromate biotransforming bacteria form different chromium deposited mines of Orissa. Emerging Trends in Mining and Allied Industries at National Institute of Technology (2-3) Feb 2008.
- A.P. Das and Susmita Mishra. Microbial remediation of hexavalent chromium from chromite contaminated mines of Sukinda valley, Orissa. International Congress of Environmental Research at BITS, Goa (18-20) December 2008.

#### <u>2007</u>

#### **Conference Publications:**

1. S. Mishra and **A.P. Das**. Adsorption of Methylene Blue onto Activated Carbon prepared from Fruit Shell. National Conference on Frontiers in Chemical Engineering at Indian Institute of Technology, Gauwhati (12-14) December 2007.

#### **Genbank Submissions**

- Manganese bioleaching Bacterial partial nucleotide sequence deposited in NCBI, GENE BANK with Accession NO- EU78195, JQ936966, KP635223, KP635224, KP635225, KT165379, KT165380, KT165381, KT165382
- Manganese bioleaching Fungal partial nucleotide sequence deposited in NCBI, GENE BANK, Accession NO- KP309809, KP309810, KP309811, KP309812, KP309813, KP309814, JX968800
- Indian Horseshoe crab partial nucleotide sequence deposited in NCBI, GENE BANK -3, Accession NO- KM350551
- Food Pathogen Bacterial partial nucleotide sequence deposited in NCBI, GENE BANK with Accession NO- KR821154, KR821155
- 5. Metgenome submission

# Study: PRJNA360904, Sample: MetSoil (SRS1956026), Experiment: soil\_sample\_R1.fq.gz (SRX2536073), Run: soil\_sample\_R2.fq.gz (SRR5226959)

## Short term course

- 1. Attended Faculty Induction Programme under PMMMNMTT scheme for the faculty members of Tripura University from 13<sup>th</sup> -19th November, 2016.
- 2. ISTE-SRM University sponsored Short Term Training Programme on "Recent Advances in Smart Materials" during 7<sup>th</sup> -12<sup>th</sup> July 2014, TACT, Bhubaneswar.
- 3.Attended AICTE sponsored QIP short term course on Environmental Genomics and Biotechnology from 2<sup>nd</sup> 9<sup>th</sup> December, 2012 at Department of Biotechnology, Indian Institute of Technology Kharagpur.
- 4.Attended TEQIP, Phase-II sponsored, short term course on Fermentation and Enzyme Technology from 1<sup>st</sup> to 5<sup>th</sup> February 2013 at Department of Biotechnology, CET, Bhubaneswar, Odisha.

## Scholarship/ Awards received:

- 1. Received Odisha Young scientist award from Odisha Bigyan Academy, Dept. of Science and Technology, Govt. of Odisha in 2015
- Received International Travel Support from Government of India, Ministry of Science and Technology, Department of Science and Technology to attend The 3rd IWA Asia Pacific Regional Young Water Professionals Conference 2010 at National University of Singapore.
- 3. Received Young Scientist award from Rajib Gandhi foundation, Odisha in 2012.

## Membership:

- 1. Member of the International Union for the Conservation of Nature (IUCN) Species Survival Commission Horseshoe Crab Specialist Group.
- 2. Life member of Association of Microbiology (AMI), India.
- 3. Life member of Indian Society of Technical Education (ISTE), India
- 4. Life member of Biotech Research Society of India (BRSI).
- 5. Life member of Odisha Bigyan Adademy.

## Post graduate thesis supervision:

Serial No.	Title of Thesis	PG Level	Year
1	Bacterial catalysed bioleaching of inorganic Manganese from mining waste residues		Awarded 2018
2	Recovery of Electrolytic Mn from mining waste by native fungal species	Ph.D	2014- Present
3	Iron removal from china clay using Aspergillusniger.	M.Tech	2013
4	Protein profiling studies of Mn bioleaching strain <i>B.pumilus</i>	M.Tech	2013
5	Fungal leaching of low grade Mn ore	M. Sc	2011
6	Bacterial leaching of Low grade Mn ore	M. Sc	2011
7	Development of biosensors for rapid endotoxin detection in fluid systems used for the production of clinically applicable compounds [BT/PR3752/MED/32/208/2011]	JRF	2012-2014
8	Biomineralization of manganese from wastes and natural resources [BT/PR7454/BCE/8/949/2012]	JRF	2014-2017
9	Development of instrumentation methodology for rapid and noninvasive endotoxin detection in Urinary Tract Infection [IDP/MED/02/2013]	JRF	2015-2017
10	Development of simple single step chromogenic methodology for rapid detection of food pathogens and toxins [BT/PR10426/PFN/20/783/2013]	SRF	2014-2016
11	Bioreactor enhanced bio recovery of manganese from mining waste residue" [SP/YO/031/2016]	JRF	2016- continuing
12	Enhanced recovery of manganese as electrolytic manganese di oxide from ferro manganese mine tailings through bioleaching [07/46SSAG/CAT]	JRF	2016- continuing

#### Name Designation Institute Dr. Mayuri Gandhi **Research Scientist IIT Bombay** Department of biological sciences, Dr. Punyasloke Bhadury Associate Professor **IISER**. Kolkata Institute of Minerals and Materials Dr. Nilotpala Pradhan Scientist Technology, Bhubaneswar, India Defence R & D Establishment Dr. Nagesh Tripathy Scientist 'C' Jhansi Road, Gwalior, India Department Nano Technology. Dr. Neeraj Dilbaghi Guru Jambheshwar University of Professor Science & Technology, Hisar-India Department of Chemical Engineering, Dr. Susmita Mishra Associate Professor NIT Rourkela Molecular and Cellular Biology Dr. Peter B. Armstrong Professor University of California, Davis Mineral Processing Division Dr. Ata Akcil Associate Professor, Suleyman Demirel University, Turkey School of Biological Sciences,, Dr. Karrie Weber Associate Professor University of Nebraska, USA NanoBiotechnology Research Professor Laboratory (NBRL), RMIT Dr. Vipul Bansal University, Melbourne, Australia Department of Biochemistry and Environmental Chemistry, Dr. Agnieszka Kuzniar Assistant Professor Lublin, Poland College of Biomedical and Life Dr Polina Prokopovich Associate Professor Sciences, Cardiff University, UK Department of Food Science and Technology, University of Sri Senior Lecturer Dr. Indira Wickramasinghe Javewardenepura, Srilanka

## National and International collaborations:

## **Reviewer:**

- 1) Biosensors and Bioelectronics, Elsevier
- 2) Chemical Engineering Journal, Elsevier
- 3) Chemosphere, Elsevier
- 4) Ecotoxicology and Environmental Safety, Elsevier
- 5) Waste Management, Elsevier
- 6) Minerals Engineering, Elsevier
- 7) Microbial Pathogenesis, Elsevier
- 8) Scientific Reports, Nature
- 9) CLEAN Soil, Air, Water, Springer
- 10) Soil Biology, Springer
- 11) Springer Book Chapters
- 12) Environmental Technology, Taylor & Francis
- 13) Geomicrobiology, Taylor & Francis
- 14) OMICS group of Journals

## **Editorial Member:**

- 1. Journal of Sensor Networks and Data Communications
- 2. Chemical Engineering, AIRCC Publication
- 3. SM Journal of Environmental Toxicology
- 4. Austin Journal of Biotechnology & Bioengineering