## **Curriculum Vitae**

## Abhijit Maiti

**Personal Details:** 

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#### **Education:**

•	Doctor of Philosophy, Chemical Engineering Indian Institute of Technology, Kharagpur, India.	2010	Evaluated by Research
•	Master of Technology, Chemical Technology Calcutta University, Calcutta, India	2004	1 <sup>st</sup> class
•	Bachelor of Technology, Chemical Technology Calcutta University, Calcutta, India	1998	1 <sup>st</sup> class
•	Bachelor of Science, Honours (Chemistry) Calcutta University, Calcutta, India	1995	1 <sup>st</sup> class

# Thesis of PhD dissertation: "Removal of Arsenic form Water using Raw and Treated Laterite as Adsorbent"

### **Industrial Experiences:**

- Worked as an Assistant Chemical Engineer at Kesoram Rayon Limited (Nayasarai, Hooghly, West Bengal, India) in the production section. Duration: February 2000 to July 2002.
- Worked as a Quality Control and Product Development Chemist at Bharat Marzarine Limited. Duration: June 1998 to January 2000.

### **Research Specialization:**

Physicochemical Process of Water Treatment and Preparation of Adsorbents

#### Patent:

• <u>Abhijit Maiti</u>, Sirshendu De, Jayanta Kumar Basu and Sunando DasGupta, Indian patent pending, Title: "Modified laterite arsenic adsorbent for removing arsenic species and its manner of manufacture" Application Number: 614/KOL/2009.

### **Research Publication:**

#### Journal:

1. <u>Abhijit Maiti</u>, Sunando DasGupta, Jayanta Kumar Basu and Sirshendu De, Adsorption of arsenite using natural laterite as adsorbent, *Separation Purification*. *Technology*, *55* (2007) 350-359.

- 2. <u>Abhijit Maiti</u>, Sunando DasGupta, Jayanta Kumar Basu and Sirshendu De, Batch and column study: Adsorption of arsenate using untreated laterite as adsorbent, *Industrial & Engineering Chemistry Research*, 47 (2008) 1620-1629.
- **3.** <u>Abhijit Maiti</u>, Himanshu Sharma, Jyanta Kumar Basu and Sirshendu De, Modeling of arsenic adsorption kinetic of synthetic and contaminated groundwater on natural laterite, *Journal of Hazardous Materials*, 172 (**2009**) 928-934.
- **4.** <u>Abhijit Maiti</u>, Jayanta Kumar Basu and Sirshendu De, Development of a treated laterite for arsenic adsorption: Effects of treatment parameters, *Industrial & Engineering Chemistry Research*, 49 (2010) 4873-4886.
- 5. <u>Abhijit Maiti</u>, Jayanta Kumar Basu and Sirshendu De, Desorption kinetics and leaching study of arsenic from arsenite/arsenate-loaded natural laterte, International *Journal of Environmental Technology and Management*, 12 (2010) 294-304.
- **6.** Abhijit Maiti, Jayanta Kumar Basu and Sirshendu De, Experimental and kinetic modeling of As(V) and As(III) adsorption on treated laterite using synthetic and contaminated groundwater: Effects of phosphate, silicate and carbonate ions. *Chemical Engineering Journal*, (2010), article in Press, doi:10.1016/j.cej.2010.01.031.
- 7. <u>Abhijit Maiti</u>, Jayanta Kumar Basu and Sirshendu De, Removal of arsenic from synthetic and natural groundwater using acid activated laterite, *Environmental Progress and Energy Sustainability*, 29(4), (2010) 457-470.
- 8. <u>Abhijit Maiti</u>, Vaibhav Agarwal, Jayanta Kumar Basu and Sirshendu De, Removal of As(V) using iron oxide impregnated carbon prepared from tamarind hull, **Journal of** *Environmental Science and Health*, *Part A:*, 45(10),(2010) 1203-1212.
- Abhijit Maiti, Jayanta Kumar Basu and Sirshendu De, Chemical treated laterite as promising fluoride adsorbent for aqueous system and kinetic modeling. *Desalination*, 265, (2011) 28-36.
- **10.** Mihir Kumar Purkait, **Abhijit Maiti**, Sunando DasGupta and Sirshendu De, Removal of congo red using activated carbon and its regeneration. *Journal of Hazardous Materials*, 145 (**2007**) 287-295.
- 11. <u>Abhijit Maiti</u>, Jayanta Kumar Basu and Sirshendu De, Fe-Al nano-oxide prepared by sol-gel method using precursor of HCl digested liquid fraction of laterite: Arsenic adsorption performance, *International Journal of Nanoscience*, (2010), accepted.
- 12. <u>Abhijit Maiti</u> and Sirshendu De, Effect of chemical constituents of raw laterite on arsenic adsorption performance of treated laterite, under preparation (2010) *Industrial & Engineering Chemistry Research*.

#### **Conferences:**

- 1. <u>Abhijit Maiti</u>, Vaibhav Agarwal, Jyanta Kumar Basu, Biswajit Sarkar, Sunando DasGupta and Sirshendu De, Removal of arsenate from aqueous system by iron oxide impregnated activated carbon prepared from tamarind shell, *CHEMCON*, Kolkata, WestBengal, India, **2007**.
- 2. <u>Abhijit Maiti</u>, Jayanta Kumar Basu and Sirshendu De, Synthesis and arsenic-scavenging performance of a mesoporous adsorbent from laterite, *International Conference on Separation Processes*, Institute of Technology, Banaras Hindu University, Chemical Engineering Department, India, 2009.
- 3. <u>Abhijit Maiti</u>, Jayanta Kumar Basu and Sirshendu De, Oxide nanoparticles of iron and aluminium prepared by sol-gel method from liquid fraction of HCl treated laterite: Arsenic adsorption performance, *International Conference Nanoscience & Technology*, Indian Institute of Mumbai, Mumbai, India, 2010.
- **4.** Abhijit Maiti, Barun Kumar Thakur, Jayanta Kumar Basu and Sirshendu De, Arsenic removal on treated laterite from contaminated groundwater, *International Congress on "Arsenic in geosphere and human Diseases" Taiwan AS2010*, Taiwan, **2010**.