# CHAITANYA KUKUTLA (253) 347-3778

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#### **EDUCATION**

Masters of Science in Civil & Environmental Engineering, New Mexico State University, Las Cruces, NM

Expected Graduation date: July 2015, GPA: 3.96 **Bachelor of Technology in Civil Engineering** 

National Institute of Technology, Bhopal, MP, May 2011, GPA: 3.56

#### WORK EXPERIENCE

Execution Engineer, Indiabulls Power Limited, Maharashtra, India

July 2011 - March 2013

- Served as the project engineer in a thermal power plant of 2700 MW capacity
- Carried out the construction of heavy foundations in BTG (Boiler, Turbine, and Generator) area.
  - Executed foundations for Boiler, ESP, Station building floor slabs and TG columns
  - Executed the works of Primary Air (PA) and Forced Draft (FD) fan foundations
- Prepared Bar bending schedules, construction programme and biannual reports for planning and commissioning
- Conducted tests on soil samples and concrete blocks in laboratory for analyzing the compaction and strength
- Executed the interior infrastructure work in the main control building (with an area of more than 3000 sq. m)

# Intern, SEW INFRASTRUCTURE LTD, Madhya Pradesh, India

- Assisted and learned to execute the work sequence in construction project relating to heavy structures such as bridges, abutments and express way paths
- Supervised bar bending of steel used for building structures
- Coordinated with contractors to clarify structural drawings
- Directed in marking layouts for excavation and issuing joint measurement records for soil strata

## GRADUATE COURSE WORK AT NEW MEXICO STATE UNIVERSITY

- Surface Water Quality Modeling
- Unit Processes/ Operation of Wastewater Treatment
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- Design of Municipal and Hazardous Waste Landfills
- Chemical Theories of Environmental Engineering
- Evaluation of Engineering data

## **ACADEMIC PROJECTS & RESEARCH**

New Mexico State University, Environmental sustainability (Re-inventing the Nation's Urban Water Infrastructure)

August 2013 – present

- Research goal is to reduce the cost involved in treating waste waters, and extract energy from the wastewaters
- Produce bio fuel from algae using waste waters by simultaneously removing nutrients from waste waters
- Study the growth rates, productivity and the net energy produced using different algal species
- Study on expanding the research to pilot scale from laboratory level
- Emphasizing on energy free harvesting techniques of micro algae

## New Mexico State University, Design Projects

- Evaluated unit process of Las Cruces waste water treatment plant and redesigned the equalization tank and bio filter for projected population with an estimation of Energy requirement.
- Designed Landfill Drainage system for Municipal waste treatment
- Studied the design of Conventional surface Water treatment plant
- Design of an anaerobic digestion unit for a Brewery waste

# Maulana Azad National Institute of Technology, Fluid Mechanics & Water Resource Engineering

January 2011 - May 2011

• Studied the existing design of spillway, crest profile and energy dissipater at Mahi river dam and proposed the efficient design by using the existing design data and the working profiles

#### TEACHING EXPERIENCE

Young Scholar program sponsored by ReNUWIt

June 2014

• Mentored high school students in 2014 summer under the Young Scholars program. Provided practical research training on treatment of Urban waste water streams.

#### **SKILLS**

- Proficient in carrying out laboratory experiments relating to civil and environmental fields
- Experienced in different harvesting techniques of microalgae used in Biofuel production
- Proficient in reading civil and structural drawings
- Trained in preparing bar bending schedule and planning report
- Experienced in executing on site construction work
- Basic knowledge of AutoCAD, Adobe Photoshop, Microsoft Office

#### **CERTIFICATIONS & MEMBERSHIP**

•	President, Indian Student Association, New Mexico State University, Las Cruces, NM	2014
•	Coordinator, resources team for RIPPLE, the technical and cultural fest of MANIT, Bhopal, India	2009
•	Founder and member, 'THE EMINENCE' first monthly newsletter in MANIT, Bhopal, India	2008
•	Founder and member, EWB, India (Engineers Without Border) in MANIT, Bhopal, India	2008
•	Holder of National Cadet Corps (NCC) 'A' certificate 'A' grade, Hyderabad, India	2004

#### **JOURNAL ARTICLES**

#### About to submit:

• C Kukutla, F Montelya, T Muppaneni, N Nirmalakhandan\*, P Cooke, S Deng; "Improving Energy Recovery from Microalgae via Bioflocculation followed by Hydrothermal Processing"

# In preparation:

• C Kukutla, N Nirmalakhandan; "Review on Harvesting Microalgae and proposing cost efficient ways"

## **PRESENTATIONS**

5<sup>th</sup> Annual challenge week, Cranefield University, UK

July 2014 Project- STREAM (Re-Inventing the Nation's Urban water Infrastructure)

- Presented a poster on Energetic Comparison of Current vs. Emerging technologies of Harvesting Microalgae New Mexico Academy of Science Research Symposium, NM EPSCOR, Albuquerque, New Mexico, USA
  - Presented a poster on Evaluation of cost effective harvesting technology to make Algal systems economical which one the best graduate poster award