

VARDHAN SENTHIL KUMAR

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Golden, CO 80401

PROFESSIONAL SUMMARY

Skilled multitasker with superior work ethic and good teamwork, problem-solving and organizational skills. Willing to take on any task to help team. Reliable and dedicated team player with hardworking and resourceful approach.

SKILLS

- AUTOCAD (INTERMEDIATE LEVEL)
- ASPEN HYSYS (INTERMEDIATE LEVEL)
- MATLAB (INTERMEDIATE LEVEL)
- PYTHON (INTERMEDIATE LEVEL)

EDUCATION

Kongu Engineering College - India
B.Tech: Chemical Engineering

08/2019-
05/2023

Colorado School of Mines - Golden, CO
Master of Science: CHEMICAL ENGINEERING

08/2023-
05/2025

WORK HISTORY

INPLANT TRAINING | ORCHID PHARMA LTD

04/2022 - 05/2022

- LEARNED ABOUT PRODUCTION OF MOTHER LIQUOR FROM DISTILLATION OF WASTE PRODUCTS IN RECOVERY UNIT
- PRODUCT OF THIS PLANT IS CONFIDENTIAL AND NOT DISCLOSED
- SUPPLY MOTHER LIQUOR TO DIFFERENT PLANTS IN DIFFERENT REGION.

INPLANT TRAINING | ULTRAMARINE PIGMENTS LTD

10/2021 - 11/2021

- LEARNED ABOUT THE MANUFACTURE OF SULFUR FOAM (A RAW MATERIAL USED IN PREPARING OF DETERGENTS)
- LEARNED ABOUT SAFETY CONTROL AND MEASUREMENTS TAKEN IN THE PLANT
- LEARNED ABOUT THE IMPORTS AND ECONOMIC CONDITION OF THE PLANT
- SECOND LARGEST MANUFACTURER OF SULFUR FOAM IN THE WORLD.

INPLANT TRAINING | NEYVELI LIGNITE CORPORATION

05/2022 - 06/2022

- LEARNED ABOUT MINING AND PROCESSING OF COAL
- ELECTRICITY IS PRODUCED FROM COAL THAT IS MINED AND PROCESSED
- IT IS AN INDUSTRY THAT IS RUN BY GOVERNMENT OF INDIA (PUBLIC SECTOR).

INTERNSHIP | UPI GROUPS LTD

06/2023 - 07/2023

- IT'S A INTERNSHIP ON SOLAR POWER PLANT.

- LEARNT ABOUT THE PROCESS OF CONVERTING SOLAR ENERGY TO ELECTRICITY VIA SOLAR PANELS.
- CONSTRUCTION COST AND WORKINGS OF THE PLANT WERE COMPLETELY STUDIED.
- PRODUCTION AND DISTRIBUTION OF ENERGY WERE ALSO OBSERVED.

ONLINE INTERNSHIPS

- OSTP - IICHE (09/2021 - 10/2021). LEARNED ABOUT POLLUTION MANAGEMENT IN ENVIRONMENT. SECURED 80% IN THE INTERNSHIP.
- NATIONAL DESIGN & RESEARCH FORUM (07/2021). LEARNED ABOUT AEROSPACE RESEARCH AND DEVELOPMENT IN INDIAN SPACE RESEARCH ORGANISATION

PROJECTS PUBLICATIONS

- **PRODUCTION OF ETHANOL FROM SYNGAS:** DESIGN PROJECT OF PRODUCING ETHANOL FROM SYNGAS. DISCUSSED ALL FACTORS LIKE MATERIAL & ENERGY BALANCES ALONG WITH DESIGNING OF EQUIPMENTS. COST ESTIMATION & FLOWSHEET OF THE PLANT ARE ALSO INCLUDED., (03/2022 - 06/2022)
- **SYNTHESIS OF KAOLIN CATALYST USING HYDROTHERMAL METHOD FOR CONVERSION OF BIOETHANOL TO HYDROGEN PRODUCTION, SYNTHESIS OF KAOLIN CLAY USING HYDROTHERMAL METHOD:** PREPARED A CATALYST WITH A MIXTURE OF KALOIN POWDER AND N-PROPYL AMINE.CATALYST IS THE PELLITIZED, EXTRUDED AND USED FOR THE REACTION THAT CONVERTS MIXTURE OF ETHANOL AND WATER TO HYDROGEN. SENT FOR LAB ANALYSIS. (SEM, TEM, XDR & BET). TO BE CARRIED OUT IN A FABRICATED PACKED BED COLUMN WHICH IS DESIGNED AS PER SPECIFIC REACTION CONDITION. . THIS PROJECT IS ALSO DONE FOR PUBLICATION PURPOSE. (09/2022 - PRESENT)
- **HYDRODYNAMIC STUDIES ON DISSOLUTION OF CARBON DIOXIDE IN WATER BY USING MULTI ORIFICE BAFFLED COLUMN:** WORKED ALONG WITH PROJECT SENIOR FOR THIS RESEARCH PAPER.THIS WORK CARRIES OUT DISSOLUTION OF CO2 WITH WATER FOR VARIOUS ORIFICE DIAMETERS OF MOBC. COMPLETED. YET TO BE PUBLISHED., (11/2022-12/2022)

LANGUAGES

French

Elementary

Tamil

Native or Bilingual

English

Professional Working