Company Introduction

JIOS Aerogel Limited a global leader in silica aerogel technology, possessing a unique method of producing silica aerogel powder that allows for a dramatic reduction in production costs without any compromise to product quality. The foundation of our company is based on R&D. We are focused on continuously improving our core aerogel process technology, lowering production cost and offering greater value to our customers. Our mission is to assist our customers in developing commercial and industrial applications, “powered by JIOS AeroVa®”.

JIOS Aerogel Limited has established new R&D center in Singapore, and now hiring industrial specialists to join the journey of strengthening the R&D arm while continuing to lead the global aerogel industry.

Job Description

Research and Development
Process Design

Degree and Experience

Ph.D. & 10 years+ experience
Masters & 15 years+ experience

Field/Area

Advanced Materials
EV Battery
Building & Construction Materials
Engineering Plastics

Subfield

Organic & Inorganic materials
Binding & Coating (functional paint, paste)
Inorganic materials for construction (gypsum board, perlite board, cement board)
Plastics (combination of resins and polymers, master batch manufacturing & extrusion/extraction)
Fiber (inorganic fiber for construction, polymer fiber for clothing)
Thin film sheet (film)
Physical and structural and performance analysis equipment (self-operating, interpreting & analysis)
Tasks and roles

Project Leader
Relevant Organization arrangement
Test Setup and Analysis

Detailed Works

Project setup & test design
Analysis equipment operation & result analysis
Feedback application & directional guide

Task/skill details by theme

Common Factors
- Designing product types and prototypes after considering technology status and specs
  - After design of concept, sourcing material (raw material)

EV-Battery
- Manufacturing of specimens (coating/paste/film, mixing, heat treatment, curing, LBL, compression, etc.) & Feasibility test
  - Performance evaluation and improvement
  - Field test, mass production concept and mass production evaluation

Building & Construction
- Coating - Evaluation of organic/inorganic binder combinations, properties (coating) and functions (insulation/heat reflection/heat resistant/fire resistant/sound proofing)
  - Gypsum board - Optimization of composites and recipes, performance evaluation (insulation/lightness), mass production evaluation
  - Cement board - Optimization of composites and recipes, performance evaluation (insulation/strength)
  - Perlite Board - Formulation and process development (mixing, compression, hardening, etc.) and performance evaluation (insulation/lightness/hydrophobicity)

Engineering Plastics
- Resin (PA, PP, PE, EVA, PTFE, etc) composite, formulation optimization
- Master Batch (composition, temperature, pressure) & Specimen manufacturing (pallet, wire, plate)
- Physical Testing (Insulation, Lightweight, Insulation, Heat Resistance)
- Parts Production and Field Application Test

Apparel
- Masterbatch manufacturing (Yarn) and textile manufacturing (Nonwoven/Fabric)
- Thin Film Manufacturing and Performance Test, Fiber Composition(lamination)

Send Resume to

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Application Deadline

31st of March, 2020