Lingjie Jin

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RESEARCH INTEREST

Energy System Simulation, Energy Conservation Technology, Distributed Energy,

Thermodynamic System, Fluid Simulation.

EDUCATION BACKGROUND

Shandong University   *Sep 2018 – Expected Mar 2021*

Master in Power Engineering and Engineering Thermophysics, School of Energy and Power Engineering

- **GPA:** 85.2/100
- **Awards:** Academic Scholarship (2019)
- **Major Courses:** Advanced engineering thermodynamics, Numerical Fluid Flow, Mathematics, Heat Transfer

North China Electric Power University   *Sep 2014 – Jun 2018*

Bachelor in Energy and Power Engineering, School of Energy and Power Engineering

- **GPA:** 80/100
- **Awards:** Huamin Charity Foundation Scholarship (2018)
- **Major Courses:** Calculus, Probability Theory, Linear Algebra, Fluid Mechanics, Heat Transfer, Engineering Thermodynamics

RESEARCH EXPERIENCES

A Simulation Model of Fast Cut Back of a Power Plant based on MATLAB (36,000 USD)   *May 2020 – Present*

- A simulation model was built for the steam heat balance of boiler superheater and high-pressure bypass based on MATLAB to studied the main steam pressure and temperature characteristics. It can provide reference for the design of PCV valve and safety valve. (completed)
- I will build some simulation models for thermal performance prediction of reheater, deaerator, condenser, small turbine under FCB condition.

Zero Discharge of Desulfurization Wastewater in Laiwu Power Plant (410,000 USD)   *Jul 2019 – Jun 2020*

- Assisted my professor to build the pilot test platform in Shandong Laiwu power plant.
- Studied the determination of ion content by Atomic Absorption Spectrophotometer**.**
- Tested the corrosion resistance of different metal materials to desulfurization wastewater.

Development of Power Plant Simulation Software (118,000 USD)   *Dec 2018 – Dec 2019*

- Developed the simulation software called CALING by configuration design.
- Built the thermal balance model of the thermal equipment of the power plant by C# language based on the iterative calculation and interpolation calculation.
- Developed a real-time calculation function, and calculated the real-time thermal economy indicators to point out the optimal operating conditions.

Numerical Simulation and Flow Field Optimization of Spray Tower for Wet Desulfurization   *Sep 2017 – Mar 2018*

- Built the spray tower model by gambit.
- The influence of the angle and shape of baffle in spray tower on desulfurization efficiency by FLUENT.
- Analyzed the influence of flue gas inlet angle on desulfurization efficiency.

PUBLICATIONS

- Xundong Hu, **Lingjie Jin**, Xudong Gao, Tao Luan, Yan Gao. "A Boiler Side Simulation and Economic Prediction of A Power Plant". Under Submission.

- Quanyou Man, Yan Gao, Yixue Zhang, **Lingjie Jin**, Tao Luan. "Comparison of the Effects of Several Typical Preparation Methods and Materials on Properties of Metal Organic Frameworks". Under Submission.

- **Software Copyright:** "Power Plant System Evaluation Software called iSDEPCI. Under Submission".

- **Patent application:** No.202010579843.7. "A Flat Loop Heat Pipe Evaporator with Carbon Fiber Capillary Wick in Comb Structure". Under Submission.

SKILLS

- **Software**: CAD, PROE, ICEM, Fluent, Photoshop, MATLAB, Solidworks, THERMOFLEX, TRNSYS
- **Programming Languages**: C++, C#, Python