



## Charles R. Ilaria

### SUMMARY

Experienced process engineer with extensive experience and proven success in all phases of project from inception to project completion. Expertise chemical plant process and mechanical design, scheduling, training and design problem resolution.

Expertise includes:

- Piping and Instrument diagram preparation
- Process plant simulation
- Hydraulic Studies
- Relief Load Determination
- Process plant equipment specification
- Scope of Work preparation
- HAZOP studies
- Utilities systems design

### WORK EXPERIENCE

#### **LXDE Corp.**

Monroe Township, New Jersey

2009 - Present

#### CONSULTANT

Petrochemical plant and refinery process design and mechanical design, utility system design, project management and HAZOP studies.

#### **Lummus Technology**

Bloomfield, New Jersey

2000 - 2009

#### PRINCIPAL ENGINEER

Led staff in the preparation of licensor packages for the petroleum and chemicals industries. Assisted mechanical contractor in interpretation of licensor requirements. Served as liaison between licensor (Lummus Technology) and detailed engineering contractors.

- Re-designed a solid catalyst handling system to reduce downtime on normal catalyst replenishment, startup and shutdown. These improvements reduced the time to start the reactor system from several weeks to three days.
- Prepared Basic Engineering Packages for hydrocracker/hydrotreater units, which produced a diesel product that was substantially cleaner.
- Improved new employee integration by organizing and implementing the piping and instrument segment of new hire orientation program that focused on policies, SOPs, processes and values.
- Led the effort to standardize the basic engineering documentation to increase the efficiency of preparing the basic engineering packages.
- Standardized the computer tools to achieve a consistently designed end-product, namely, the basic engineering packages.
- Was promoted for leading the mechanical engineering effort for new, patented process technologies.

**Lummus Technology**  
Bloomfield, New Jersey

1987- 2000

**SENIOR ENGINEER**

Assisted staff in the preparation of licensor packages for the petroleum and chemicals industries.  
Assisted mechanical contractor in interpretation of licensor requirements. Served as liaison between licensor (Lummus Technology) and detailed engineering contractors.

- Prepared Basic Engineering Packages for ethylene production facilities, hydrogen (steam-methane) production facilities and olefins conversion units.
- Supervised small groups of junior engineers in the production of Basic Engineering Packages.
- Piloted several information technology projects, including implementation of the Local Area Network, company e-mail system, MS Windows and MS Office.
- Was awarded "Employee of the quarter" for leading the effort to introduce the e-mail system.
- Converted several computer programs to PC operation, thus allowing the shutdown of a mini-computer system (and saving the company \$500,000/year).

**Allstates Technical Services**  
Newark, Delaware

1986 - 1987

**PROJECT ENGINEER**

Led staff in several small projects for a major chemical manufacturer, from project request originating in the operating plant, through design, estimating, project approval, design and construction. Scheduled the engineering/procurement activities for these projects. Wrote the scopes of work for these projects, and served as liaison between the home office and the operating plant for activities concerning these projects.

- Devised method to track engineering costs for several small projects in the fine chemicals field to reduce the home office budget overruns from 10% to 0%. Received "Employee of the Month" for this idea.
- Participated in several HAZOP studies for a major chemicals manufacturer.

**Hydrocarbon Research, Inc.**  
Gibbsboro, New Jersey

1985 – 1986

**PROJECT ENGINEER**

Led staff in the capacity of project manager, for a landfill gas recovery project. Activities included equipment design and procurement, scheduling, start-up and liaison between home office and mechanical contractor.

- Developed and implemented a landfill gas recovery system for an Atlanta landfill.

**H-R International**  
Edison, New Jersey

1984 - 1985

PROCESS ENGINEER

**MW Kellogg Company**  
Hackensack, New Jersey

1983 - 1984

SYSTEM ENGINEER

**The Lummus Company**  
Bleemfield, New Jersey

1976 - 1983

PROJECT ENGINEER

- Prepared all project documentation for several areas of the first US commercial scale High BTU coal gasification plant (Dakota Gasification Company).
- Co-ordinated the mechanical design for several areas of the first US commercial scale High BTU coal gasification plant
- Prepared project documentation for several Merox units for a refinery in the Far East.

#### EDUCATION

Bachelor of Science, Chemical Engineering, New Jersey Institute of Technology, 1975

#### COMPUTER PROIDIENCY

Corel WordPerfect Office, MS Office, Lotus Notes, Simulation Sciences PRO/II process simulator



LXDE

[www.lxdecorp.com](http://www.lxdecorp.com)

## TABULATION OF EXPERIENCE

<u>Project Type</u>	<u>Client/Location</u>	<u>Function</u>
<b><u>Refining (Oil/Gas/Energy) Projects</u></b>		
Hydrocracking	Staatsolie Maatschappij, Suriname	Principal Engineer
Hydrocracking	AB Mazeikiu Nafta, Lithuania	Principal Engineer
Hydrocracking/Amine Regeneration/Sour Water Stripper	MOL Hungarian Oil and Gas PLC, Hungary	Principal Engineer
Hydrocracking (dhc/mhc)	Jubail Export Refinery Project, Saudi Arabia	Principal Engineer
Hydrocracking	Engen Petroleum Ltd., Durbin, South Africa	Principal Engineer
LC-FINING (Cat Handling)	Northwest Upgrader (LC-FINING), Canada	Principal Engineer
Hydrocracking (revamp)	MRC Refinery, Malaysia	Principal Engineer
ISODEWAXING	TOTAL Normandy Refinery, France	Principal Engineer
LC-FINING (Cat Handling)	Shell Canada, Alberta, Canada	Principal Engineer
Hydrocracking (Lubes)/Isodewaxing	CPC, Talin Refinery, Republic of China	Principal Engineer
Isotreating (Diesel/Naphtha)	Premcor, Port Arthur, Tx	Principal Engineer
Hydrocracking (Fuels)	WEPEC, China	Principal Engineer
Olefins Conversion	Mitsui, Japan	Principal Engineer
Hydrocracking (Fuels)	SCANRAFF, Sweden	Principal Engineer
Hydrocracking (Fuels/Lubes)	SAMIR, Morocco	Principal Engineer
Diesel Hydrotreating	Bahrain Petroleum, Bahrain	Principal Engineer
Hydrocracking	Bahrain Petroleum, Bahrain	Principal Engineer
Syn-Flex hydrotreating	Statoil, Denmark	Principal Proc. Eng.
LC-FINING	Shell Canada, Canada	Principal Proc. Eng.
SynSat® hydrotreating	Statoil, Denmark	Sr. Process Engineer
FCC Catalytic Cracker	Hess Refinery, Port Reading, NJ	Systems Engineer
Landfill Gas Recovery	Atlanta, Georgia	Project Engineer Start-up Engineer
FCC Catalytic Cracker	CPC, Kaoshung, ROC	Project Engineer
Coal Gasification	Dakota Gasification Company, North Dakota	Project Engineer

### **Petrochemical Projects**

Hydrogen	Kirishinefte Orgsintez, Kirishi, Russia	Sr. Process Engineer
Hydrogen	Lukoil-Permnefte Orgsyntez, Perm, Russia	Sr. Process Engineer
Olefins Conversion	Hellenic Oil Corp, Greece	Principal Engineer
Ethylene	Yanpet, Saudi Arabia	Principal Proc. Eng.
Hydrogen	Hohbond Refining, PRC	Principal Proc. Eng.
Olefins Conversion	Miro, Germany	Process Eng. Mgr.
Ethylene	Shurtan, Uzbekistan	Principal Proc. Eng.
Natural Gas Recovery	Shurtan, Uzbekistan	Principal Proc. Eng.
Ethylene	Honam, Yeosou, Korea	Principal Engineer
Ethylene (Revamp)	SPC, Jinshan, PRC	Sr. Process Engineer
Hydrogen	Nizhnekamsk, Russia	Sr. Process Engineer
Hydrogen	JSC Nizhnekamsknefte KHIM, Tatarstan, Russia	Sr. Process Engineer
Ethylene	Jinshan, PRC	Sr. Process Engineer
Ethylene	Formosa Petrochem Corp., Taiwan, R.O.C.	Project. Eng. Mgr.
Ethylene (Revamp)	Angarskneftechim Co., Angarsk, Russia	Project Eng. Mgr.
Ethylene	EMSB, Kertih, Malaysia	Process Design Eng.
Ethylene (Revamp)	Organisheskysintez, Kazan, Tartarstan Rep.	Process Design Eng.
Ethylene (Revamp)	Beijing, Yanshan Petrochemical Corp., PRC	Process Design Eng.
Ethylene	Tianjin Ethylene Complex, Tianjin, PRC	Process Design Eng.
Ethylene	Dushanzi Ethylene Complex, Dushanzi, PRC	Process Design Eng.
Ethylene	Chandra Asri Petrochemical Corp., Indonesia	Process Design Eng.
Ethylene	Luzon Petrochemical Corp., Luzon, Philippines	Process Design Eng.
Ethylene	PQU, Sao Paulo, Brazil	Process Design Eng.
Ethylene	Copene, Camacari, Brazil	Process Design Eng.
Ethylene	CNTIC, Sheng-Li, PRC	Project Engineer

### **Chemicals**

Iodine Recovery	E.I. duPont, Deepwater, NJ	Project Engineer
Emissions controls (several projects)		
Fine Chemicals	Bayonne, New Jersey	Resident Engineer