Alistair Marshall MEng CEng MIChemE

Process & Control Engineer

Areas of Expertise

Advanced Process Control

Alarm management

Functional Safety

Graphics & HMI development

Cybersecurity

Honeywell TDC

Honeywell Experion PKS

Honeywell PBM

Honeywell Safety Manager

Aspentech DMC

Process safety

HAZOP/LOPA

Computer Automation

Programming (Javascript, Python, VB

and others)

Risk assessments

Continuous operations

Procedure writing

Oil and Gas

Food safety

Professional

Chartered Engineer

Functional Safety Engineer

Former Chair IChemE Scottish

Members Group

IChemE Applied HAZOP

IChemE Practical Distillation

Technology

NEBOSH National General Certificate

Contact

Mobile: 07910 243 812 Email: cv@a14m.uk Website: www.a14m.uk

Personal Summary

I am a versatile engineer with extensive experience in the process industries, excelling in both plant operations and process control. My ability to adapt quickly to new challenges and systems has allowed me to deliver significant improvements in plant efficiency and safety. I thrive in dynamic environments and am known for my problem-solving skills and technical expertise.

Employment History

Process Control Engineer

Petroineos Manufacturing Scotland Ltd. (Grangemouth)

May 2015- Present

I work in the Automation Team at Grangemouth Refinery providing control engineering support to all the operating processes, tank farm and rail terminal. My role varies, from day to day support of running plant, modification and development of existing control, through to project support for new plants, both control and safety systems. I have implemented and maintained MVPC projects using DMC on various refining units. I am approved to authorise and perform safety system modifications at Grangemouth and am certified Functional Safety Engineer (TÜV Rheinland) # 28226 / 24 – Safety Instrumented Systems until September 2028.

I have delivered training to control room operators on using new control schemes, including the new Honeywell blending package, which I am also the system owner and am responsible for maintaining. I am also regularly sought out for my ability to provide programming solutions to a myriad of IT problems outwith my core role.

Recently I chaired a full review of the site's cybersecurity risk assessment, reconfiguring the zones and threats to reflect how technology usage has changed within the refinery and updated guidance to the NIS regulations.

Operations Engineer

Petroineos Manufacturing Scotland Ltd. (Grangemouth) November 2011- May 2015

Ensured safe and efficient operation of Catalytic Reformer and Cryogenic units.

I was the nightshift technical lead during regen and turnaround events both while I was in the role and for many years after leaving the role. I regularly had to respond to unexpected events that occurred during the nightshift and, using my technical knowledge and experience, provided solutions that would allow the event to continue.

Employment History (continued)

Graduate Operations Trainee

British Sugar PLC (Newark & Norwich) September 2009-October 2011

This was a factory-based position, working on shift to gain hands-on experience while learning the full production lifecycle.

As an acting shift supervisor, I led shift operations, balancing throughput, extraction, and energy usage to optimize plant performance.

Managed a team, ensuring safety and efficiency during shifts.

IChemE Voluntary Work

Chair - Scottish Members Group June 2019 - 2021

The role of the chair was to lead the committee in organising a programme of events that enhances the value of IChemE membership, and encourage new members to participate in our events.

Disastrous Dinners Coordinator 2018-2020

I devised and hosted Disastrous Dinners, a series of talks where members meet to discuss an accident or incident and what we can learn from it. After the presentation, there was a social dinner and drinks with lots of time to continue the discussion. I presented two talks myself and organised six other talks in the first year.

Academic & Professional Qualifications

Institution of Chemical Engineers

- Chartered Engineer (CEng)
- Member of the Institution of Chemical Engineers (MIChemE)

University of Edinburgh 2004-2009

- MEng Chemical Engineering (1st Class Honours)
- Salters Graduate Prize winner 2009

Training Courses

- TÜV Rheinland Functional Safety Engineering (SIS) delivered by Honeywell (September 2023)
- Honeywell Custom Algorithm Block (September 2023)
- Honeywell Safety Manager Implementation (December 2021)
- Honeywell C300 Controller Implementation (September 2020)
- Honeywell Experion PKS Fundamentals (April 2018)
- AMT DMCplus Implementation (April 2016)
- Honeywell TPS Fundamentals (July 2015)
- NEBOSH Level 3 National General Certificate (October 2010)

Personal Interests

In my spare time, I enjoy endurance running, scout leading, writing code and reading widely. My favourite programming languages include Python and JavaScript though I have enjoyed dabbling in more some obscure languages as individual projects have required.