#### **Gideon Myron Kaufmann**

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#### **Summary:**

#### **Profession: Chemical Engineer**

#### **Experience as R&D specialist, design and management of complex research processes; OHS and quality specialist, Project Management, Analytical characterisation**

#### **Skilled in Lab and vital infrastructure Management, Business Administration and Mechanical workshop.**

#### **Experienced in supervision, Design of test units, problem solving, Process evaluation & optimisation**

#### **Expert gas system/ reticulation/ repair/ retrofitment engineer, Scientific equipment technician**

#### **Excellent analytical, Problem solving skills, Lean thinking, Optimisation, Expert technical background, Conflict resolution, Medical practitioner and Negotiation and Leadership practices.**

#### **Fluent in Hebrew, English mother tongue, excellent communications and leadership skills**

#### **Expertise:**

#### **GLP, GMP, Compressed gas special mix preparation, analytical scientific equipment experience, Particle preparation, Compressed gas systems expert engineer, engineering drawing & design, SHEQ, ISO9001/14001, Manufacture/ commissioning of pilot plant test units for R&D, Fossil and alternative fuels researcher, mechanical fabrication experience, Safety rep/officer, incident investigator, risk assessor, HAZOP, OREP, Emergency Medical technician**

**Research Fields of Interest:**

Alternative fuels, catalysis, water treatment, renewable energy, safety, OHS, pro-active maintenance, military, problem solving, continuous improvement, pharmaceutical research, agriculture, medical research, green energy, academic research, values-based leadership, lean manufacturing, six sigma, process control and optimisation.

#### **Computer Proficiency:**

#### MS Office, Visio, Solid Edge, SolidWorks, ASPEN, Low to Medium computer support, problem solving and repairs.

#### **Analytical Equipment**

#### GC (MS, FID, TCD), FTIR, TGA, Calcination, Centrifugation, Rotary Evaporation, Rheometry, Pelletisation equipment, Deionised water, Filtration, Micronisation and milling, Autoclaves, Spray drying, Furnaces, Ultrasonic equipment, vacuum. HPLC, titration, spectrophotometry, photometry, refractometry, environmental analyses, distillation, incubators.

#### **Employment experience:**

Dec 2020: **Senior Engineer – Technical Sales, Medent, Be’er Sheva**

Lab scale through Industrial scale Engineering Sales

July 2020: **Chemical Lab Analyst, Arnie Miller Labs, Be’er Sheva**

Lab Analyst conducted environmental quality control testing,

GMP Compliance, Method development, Chemical lab analysis

Left November 2020.

2007-2019: **Senior Technical Engineer, Catalysis Institute, University of Cape Town**

* Manager, supervisor, R&D algae to bio-crude specialist, Pilot plant test unit fabricator, high pressure gas system engineer, scientific equipment trainer/technician, grad students mentoring, problem solver, lean optimisation, mechanical fabrication and retrofitment, R&D specialist in multidisciplinary environments within mech/chem engineering, medic.
* Conducted: GLP, GMP. Commissioned pilot plants and scientific equipment, SOP compilation, Process evaluation and optimisation.
* Participated in research, continuous improvement, management committees, H&S committee, hiring selection committees, building oversight, lab management, vital infrastructure and extraction system management
* ***Successfully negotiated pricing for provincial universities, free repairs to gas infrastructure, exceeds award for going over and above.***
* R&D Laboratory management, management of 6 engineers in a Pilot test unit manufacture R&D workspace, Gas Infrastructure (Inert, flammable, toxic, specialized mixes), Managed a group of workers/students in R&D labs, Compilation of Standard Operating Procedures(SOPs), Occupational Health & Safety(OHS), Chief First Aider and managed over 30 departmental first aiders, Head Researcher Algae to Bio-fuel. Marker and Moderator for UCT GSB.

#### **Incubator company experience:**

#### 2010-2019: **HySA Catalysis –** Lab management, design and manufacture of retrofitment parts for R&D purposes,

#### Installation of hydrogen fuels and electrolysers, troubleshooting and problem solving.

#### **iKEY(aka Cape Catalytix) –** Lab Management and Initiated ISO and e quality recognition, QC, Design,

#### manufacture, commissioning and retrofitment of pilot plant test units for R&D

#### purposes (UNISA, UWC, PetroSA, SASOL, UCT, CPUT).

**Military service (Lone Soldier):**

1999-2001: 188 Tank Corps, Staff Sergeant, IDF

Outstanding soldier award advanced tank course 2000, Promoted in 2001 to tank crew for Brigade Commander of 188.

**Education (All my Chemical Engineering and Chemical Degrees recognised by Israeli Education Department):**

2017-2018: **PGDip Business Administration** Honours Degree in Business Administration**,** GSB, University of Cape Town ([www.uct.ac.za](http://www.uct.ac.za)), Class medal Bus. Acumen II

2011-2013: **MTech Chemistry, (**Masters Degree) NMMU (www.nmmu.ac.za), South Africa,

Thesis – Hydrothermal liquefaction of Scenedesmus Obliquus in a continuous reactor system

Goal 1: Problem solve reactor and system blockage Goal 2: Manufacture Bio-crude (successfully manufactured bio-crude with comparable thermodynamic properties as coal.

2008-2009:  **BTech Chemical Engineering**, (Bachelors Degree) CPUT (www.cput.ac.za), South Africa,.

Thesis – Hydrocracking of Dodecane

2005-2007:  **ND Chemical Engineering**, (Engineering Technology Diploma), CPUT, South Africa

Project: Optimisation in the Centre of Catalysis Research Gas Store

**Courses:**

2002-2019: Emergency Medicine (Ambulance) (Israel & SA), Firefighting, Breathing Equipment, SHEQ, Risk, ISO9001, Spectroscopy, Six sigma green and yellow belt short courses (in progress), project management (in progress).

**Languages:** **English** – mother tongue, **Hebrew** – very high level.