

- ⇒ **R&D Manager - skilled in leading development from the requirements definition, through specifications and planning to transfer from development to manufacturing**
- ⇒ **Experienced in reviewing and initiating development of innovative, multidisciplinary, technologies, managing vendors and sub-contractors, to meet project goals**
- ⇒ **Proven ability to streamline processes and reduce cost; to recruit, manage and motivate engineers, effectively assigning and prioritizing tasks**
- ⇒ **Fast self-learner, high analytical and decision-making skills enabling efficient problem solving, excellent interpersonal relations**

Employment experience:

From 2023: **R&D Manager - Novocure** (Medical Company, @ Nasdaq)

- **Manage R&D department**, 15 people (professional & operational aspects) including budget, recruiting, team building, adaptation, etc.
- **Solution Development - leading and delivering**, Technology assessment, POC leads, Pre-Clinical and Clinical multidisciplinary platforms & complex devices development from POC to final ready for production products, post-production support.
- **Managing** Hardware, Firmware, Software departments collaboration with Mechanical, early Innovation, Physics departments.

2017-2022: **R&D Manager - Maytronics** (Home Robotics & Automation, @ TA-35)

- **Manage R&D department**, 40-50 people (professional & operational aspects) including budget, recruiting etc. Managing Hardware, Firmware, Software, Mechanics, Physics & Optics, Statistics, Cloud and Research Team Leaders.
- **Responsible for full development cycle** from selecting technologies, through feasibility studies, development of "Ready to Manufacturing" products with and planning to deploy to manufacturing in collaboration with Engineering NPI departments.
- **Develop innovative and multidisciplinary solutions** including hardware, software, mechanical, and sensor developments, connected to IoT, Cloud BE platform, Data Management, and user APP's, FE's.
- **Manage & leading research** of "Optical Measurement", "Industry 4.0" & "Machine Learning" directions.

2015-2016: **H/W Team Leader Munters Ltd** (Agriculture climate and environmental control solutions)

- **Manage H/W team including professional, operational and integration aspects.**
- Define & Lead H/W Development of:
 - **Climate controllers** connected to **cloud**.
 - Long distance **wired and wireless communication** devices.
 - **Water quality sensing equipment** for greenhouse and henhouses.

2006-2015: **Blue I Water Technologies** *A global provider of advanced controllers and analysers for water treatment*
VP R&D (2013-2015)

- **Manage the R&D department (professional & operational aspects)** including budget, recruiting etc.
- **Develop innovative, multidisciplinary, products**, from selecting technologies, through feasibility studies and planning to **transfer to manufacturing in collaboration with the Manufacturing Manager**
- **Identify market trends to define and develop products adapted to customer needs**, in collaboration with the Global Accounts Manager
- **Define work plans and set development priorities, initiate development of new technologies**, e.g. upgrading Company products at little additional cost, incl. selecting & managing diverse sub-contractors

Alex Rachman – R&D Manager

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- **Obtain funding for several projects**, from the Office of the Chief Scientist, provide progress reports, as required by law
- **“SMART LEA” development & implementation:** a new, battery-operated, product for remote / on-site monitoring (8 parameters) over mobile and IOT, which remains in operation up to 5 years. The system:
 - Includes **optics, electro-mechanics, IOT, PC software** connected to the cloud via USB
 - Falls under the **Smart City** category, allowing **immediate response to municipal water quality issues as well as pro-active functionality**
- **Development of a new water turbidity measurement system** which includes a colorimeter with optical and electro-optical capabilities - HG-702 TurbiPlus®

R&D Manager (2009-2013)

- **Management of the Company's Research & Development** incl. five Engineers and sub-contractors, in Israel and overseas, as well as Engineering procurement, as necessary
- Development of OEM products per customer demands (global companies such as Thermo Fisher Scientific and Nalco USA)
- Write product HW / SW requirements and specifications as well as complete integration plans, and manage the project's timetables
- **Plan to meet regulatory requirements** in various countries and monitor testing processes in local and foreign regulatory labs, up to transferring to manufacturing
- **Development of cloud-based smart systems**, of new PCBs & electronics, supporting diverse systems
- Responsible for management and System Engineering of multi-disciplinary measuring products which include: electronics, optics, electro-mechanics, monitoring, SW, mechanics, communications: RFID, Cellular, IOT, M2M, Wi-Fi, Ethernet) and mobile applications for iOS and Android.
- Development & deployment of specialised monitoring systems for water, wastewater, poultry, and other industries, tailored to meet customer's needs
- Established a water lab customized to R&D testing requirements
- Manage Company Customer Support services including engineering assistance to the Support Technicians, providing assistance to distributors, world-wide
- Manage & collaborate with R&D and local sub-contractors' staff
- Develop and file patents for registration. Submit projects for the OCS incl. obtaining funding

Project Manager \ Senior Engineer (2009-2006)

- **Responsibility for development, from inception**, of a low-cost water controller for private and public swimming pools, measuring free chlorine and pH in water
- **Define & write specs for a multi-disciplinary product** includes PCBs, software, mechanics & optics
- **Manage schedules, budget, buying and project integration**, approve alpha & beta prototypes and obtain regulatory approval
- **Manage transfer from development to manufacturing**, cost reduction, local & foreign sub-contractors
- **Develop low-energy analogue PCBs** for analogue measurements, communications-combined digital PCBs (Modbus, RF, cellular, motors & pumps). Develop embedded software for Company products
- Develop unique mechanical assemblages – plastics for moulding, housing and packaging
- File patents in multiple countries, obtain funding from the OCS
- **Won the 2008 innovation award and has been selling on a wide scale since**

2001-2006: ElmoTech Ltd. A Dmatek subsidiary - a global provider of leading presence and location verification technologies, designed for monitoring individuals in the law enforcement and corrections markets

System Engineer / Product Manager (2004-2006)

- Team Leader of three Engineers, managing development projects and implementing products into the system from product definition, task assignment and execution supervision

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- Customer-facing technical management, planning of automatic / semi-automatic testing devices, transfer from development to manufacturing

R&D Engineer – Embedded Software & Hardware (2001-2004)

- Development of network routers (Multi-layer Systems communications), local pagers, personal badges / electronic handcuffs, cellular communications, GPS, Audio, RF transmitters / receivers, printed antennas, information transfer systems
- Software development (C & Assembler) for microcontrollers, interfacing with USART, Compare, DA, AD, SPI, IIC, PWM etc.
- ***The products are still operational and are sold worldwide***

1998-2000: **Analysar – RF Department – Motorola Israel, Arad (student position)**

- Development verification of electronic boards: identify and resolve bugs down to the component level, extensively using dedicated testing equipment
- Plan testing devices, transfer from development to manufacturing

Military service:

Ground Communications Technician, 2nd and 4th level maintenance of radio equipment, IAF (1994-1996)

Education:

2008: **Water Analysis Course – water & measuring systems** (100 hrs), Tel Hai College

2006: **Radio and Microwave Engineering (RF)**, 98 average, (136 hrs), "INTELLIGENT"

2000-2002: **M.Sc. in Electronic Engineering**, with honours, Vladimir State University

1996-2000: B.Sc. Electrical Engineering, 84 average, Beer Sheba University

1990-1993: Full Matriculation, major in Electronics – IAF Technical School, Beer Sheba

Tools & Technologies: Jira, MS Project & Office, Spice, Cad S/W (OrCAD, Altium, PADs), SolidWorks, C, Assembler