Maxime MROVCAK
ENGINEER

Born:	8 November 1989	**Mobile (UK):**	+ (44) 7 917 317 389
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Marital status:	Male, single	**e-mail:**	mrovcak.maxime@gmail.com
Driving:	Licence B		

Employment History

Mar 2021 – April 2023

Manufacturing Systems and CI engineer at Cox Powertrain Ltd. – *Shoreham-by-sea, UK*
Integration of various automated devices to the Manufacturing Execution System (MES) to enhance manufacturing capability and quality control of Cox's assembly lines. It includes power tools, Siemens S7 controlled machinery, Keyence cameras, Zebra printers, etc. Setting up robust data pipeline to ETL key manufacturing and business data. Development in AngularJS of fully customisable MES live data dashboards tailored to various business stakeholders.

Oct 2019 – Mar 2021

Continuous improvement engineer at Cox Powertrain Ltd. – *Shoreham-by-sea, UK*
Optimisation of current process capability by reducing waste and quality issues using the Lean methodology. Implementing industry 4.0 technologies to improve Takt time and limit quality issues while keeping costs down.

- Set-up automated and fully programmable data collection strategies to monitor and optimise production
- Implement continuous improvement activities using the Lean methodology and World Class Manufacturing techniques
- Interact with the engineering and quality teams to feedback process and design issues
- Lead and mentor Six-Sigma Green belt personnel to drive performance and promote a Lean environment

Jan 2015 – Oct 2018 (ca. 4 years)

Project Leader in the Plasterboard Development Team at British Gypsum Ltd. (A Saint-Gobain Company) – *Nottingham, UK*
Development and innovation in plasterboard products for the UK market and optimisation of current product base for cost reduction and re-approvals.

- Leading projects with a cross-functional team involving technical, operations, marketing, supply chain and purchasing
- Innovating, and developing new plasterboard prototypes in the laboratory
- Supporting process transfer from laboratory to plant scale
- Prediction and optimisation of product formulation and process settings using a Six-Sigma approach (DMAIC, SOPs, MSAs, root cause analysis, SPC and DoEs with Minitab)
- Organising and leading plant trials for new product approval
- Present project progress to the executive board on a monthly basis
- Abiding by and promoting the strong health and safety culture in place

My main role was to provide technical support to the factory using an experimental and data driven approach. I would work on the factory shop floor to implement changes and promote continuous quality improvement and cost reductions.

Jan 2013 – Oct 2014

Project Leader in the special materials and joining section at TWI Ltd. – *Cambridge, UK*
Development of joining processes for members' companies involving a wide range of

(ca. 2 years)	techniques such as diffusion bonding, brazing, soldering, heat-treatments, resistance and ultrasonic welding, electroplating and sol-gel chemistry for coating deposition.

- Writing detailed project proposal for our members (Technical and financial aspects) or for publically funded project (Technology Strategy Board and Horizon 2020 programs)
- Undertaking the work proposed in the laboratory
- Writing final report containing the detailed procedure developed
- Material design (jigging and parts)
- Managing the project (orders, budget and interactions with clients)
- Process review on our members' sites

I have been working on three different collaborative projects and other single client projects:

- MEMLAB: Development of lightweight lead-acid battery based melt-spun and sintered fibre electrodes
- SOLEGLASS: All-glass mid temperature direct flow thermal vacuum tube for solar collectors
- RENEWX: Development and demonstration of compact, multi-source heat exchanger technologies for renewable energy applications

Feb – Sep 2012	**7 months confidential placement at Solvay HQ** – *Brussels, Belgium* R&D in high-performance graphene-based nanocomposites for anti-corrosion applications – wet route polymers, electrochemistry, DMTA, zêta potential, DLS, SEM, and DSC
Jun – Aug 2011	**3 months placement at University of technology Dresden** – *Dresden, Germany* R&D in gold nanowires growth via dielectrophoresis for biosensors – Electrochemistry, SEM, lithography, CVD, impedance spectroscopy
Jun – Aug 2010	**3 months placement at the Manchester Interdisciplinary Biocentre** – *Manchester, UK* Research in computational biology to design a force field for amino acids with the objective to predict their ab-initio energy

Education and Qualifications

2009 –Oct 2012	**MSc - Engineer in chemistry specialised in material science** Polymers, Glass and Ceramics, metallurgy, chemical engineering and characterization techniques (XRD, SEM, XFM, AFM, mechanical testing, etc.) L'École Nationale Supérieure de Chimie de Lille (ENSCL) – *Lille*
2007 – 2009	**BSc - Intensive courses in Chemistry, Physics, and Mathematics** To prepare for the competitive entrance examinations to French chemistry School ("Grandes Écoles") – Laurent Lavoisier School – *Mulhouse*
2005 – 2007	**High-school - General and industrial processes chemistry** Baccalaureat with the highest honours (equivalents to A-levels in Chemistry, Physics, Mathematics) – Louis Vincent High school – *Metz*

Personal Achievements

July 2009	**Successful competitive examination to French Chemistry Schools**
August 2007	**Successful candidate at French national contest** – The fourth place at general and industrial processes chemistry contest **Successful candidate at National Olympiads of Chemistry** – The seventh place at a regional level

Other Skills and Qualifications

Languages	**French:**	Mother tongue	**English:**	Fluent – TOEIC 910
	Spanish:	Fluent	**German:**	Basic conversation (A2)
	Portuguese:	Intermediate (B1)	**Mandarin:**	Basic conversation (A1)
Computer skills	Programming in VB.net, C#, Fortran90, SQL, HTML5, CSS3, JS, AngularJS, Node.js, PHP, Perl. Access, Word, Excel, PowerPoint, Maple and Minitab. Data mining and manipulation. AI programming with Python3.			
Project Management	Solid knowledge of the Stage and Gate process, QFD, Gantt chart, Stakeholder management, and WBS			
Continuous Improvement	Lean manufacturing, Black Belt Six-Sigma tools (DMAIC, House of Quality, Fishbone diagram, MSA, SOPs, DoEs), TRIZ (Creativity tools) and 5S methodology			
Health and Safety	Good knowledge of risk assessments, COSHH assessments and SafeOPs writing			

Hobbies and Interests

- Backpacking, Cooking, IT, Social events
- Football (In a team for 4 years), Running (20km of Brussels – 1:38:44) Badminton, and Swimming