Jurgen Cluytmans

Curriculum Vitae

Personal data

Name & surname: Jurgen Cluytmans

Address: Ravenshoek 15 / 102, 3020 Herent, Belgium

Mobile: +32 (0)478 45 38 91

E-mail / website: jurgen.cluytmans@telenet.be / www.jurgencluytmans.be

Date & place of birth: 4 May 1982; Edegem, Belgium

Nationality: Belgian



Career

January 2022 - present Installations Design Manager, Fluxys Belgium NV

July 2019 - December 2021 Green Gas Engineer, Fluxys Belgium NV

March 2017 - June 2019 Technical Manager, C4Gas SAS

November 2012 - June 2019 Study engineer Piping & Mechanical, Fluxys Belgium NV

August 2006 - October 2012 Inventory Controller, Fluxys Belgium NV

Positions

September 2023 - present Member, Hydrogen Task Groups ASME B31.3 & B31.8

June 2023 - present Contributing Member, ASME B31.12 Section Committee

November 2022 - present Member, ASME EU IWG B31.12

March 2020 - October 2021 Lecturer on "role of NG infrastructure in H2 economy",

WaterstofNet Hydrogen Academy

April 2020 - December 2021 Member representative, HyReady JIP

February 2020 - December 2021 Member representative, H2 Gas Assets Readiness

January 2018 - present Member, Sector Forum Energy Management - Workgroup Hydrogen

November 2016 - December 2019 Member representative, European Pipeline Coating Platform

June 2016 - February 2022 NBN Head of Delegation to CEN-CLC/jTC 6 "Hydrogen in energy systems"

Chairman of the Belgian National Mirror Committee to CEN-CLC/jTC 6

September 2014 - June 2022 Lecturer on "pipeline coatings" in Master of Pipeline Technology programme,

Avans+ MB BV

June 2012 - November 2016 Convenor, European Pipeline Coating Platform

Volunteering Experience

Member of IRET-KIEA Jongerenplein (Youth Council), Brussels, Belgium	2018 - 2021
International Cadet Class Association, Dorchester, United Kingdom	2021 - present
World Sailing, London, United Kingdom	2013 - present
470 Internationale, France	2013 - 2018
International Optimist Dinghy Association, Aalborg, Denmark	2012 - 2017
International 420 Class Association, Zürich, Switzerland	2011 - present

Education

MPT Degree – Master of Pipeline Technology	2012
M.Sc. Degree in applied electromechanical engineering	2005



Professional Experience - description of career & positions

Installations Design Manager, Fluxys Belgium NV/SA

- I lead a team of about 20 designers, who create the deliverables (design and as-built) for different domains such as piping, civil works, electricity and instrumentation.
- I prepare the team for tomorrow's workplace by
 - looking at possibilities for
 - nurturing agility and adaptability;
 - balancing autonomy and accountability;
 - reviewing the efficiency of planning tools and reporting systems;
 - enabling learning & development;
 - guiding them from a customer orientation towards stakeholder engagement.
- I organise the succession planning for my team
- I provide ad-hoc support to green gas projects (H2, CCUS) based on my previous roles.

Green Gas Engineer, Fluxys Belgium NV/SA

- I develop and document the required technical know-how on relevant green gas (H2, synthetic gas, ...) specifications / standards, infrastructure requirements (for both existing and new infrastructure) and applications;
- I liaise with the domain experts in the engineering department to ensure the abovementioned infrastructure requirements are subsequently implemented in the company's technical specifications;
- I act as technical person of contact for colleagues, ensure green gas knowledge sharing within the company and provide support to related green gas projects and studies;
- I represent Fluxys at (inter-)national technical green gas conferences and participate in the relevant work groups.

Technical Manager, C4Gas SAS

- I keep the C4Gas Technical Specifications up-to-date and in line with applicable legislation and engineering standards, focusing on challenging, rationalising and harmonising current specifications towards market practice and normative evolution;
- I perform benchmark studies on the C4Gas Technical Specifications against those of other, similar, organisations for the most cost effective product purchase;
 - I manage the supplier technical qualification process on behalf of the partners and customers (technical appraisal of suppliers, technical documentation review, technical audits);
 - I review tenders for technical accuracy and I assess suppliers' technical deviation requests with customers' approval.

Study engineer Piping & Mechanical, Fluxys Belgium NV

As study engineer Piping and Mechanical, I'm - together with a small team of colleagues - responsible for the follow-up on design for construction / modification of the company's installations and transportation pipelines, giving special attention to safety, environment, quality and budget:

- creation of specifications / company standards;
- monitoring of legal and normative market evolution;
- supervision of stress calculations and pipeline engineering studies;
- provision of engineering services to the company's international affiliates;

- treatment of feedbacks from operations staff;
- performance of safety tours and task observations at existing company facilities and at construction sites:
- development of in-company courses for colleagues.

I'm cooperating with other services and departments of the company, with 3rd party engineering consultancy companies, federal public services and with inspection organisms.

As NACE certified coating inspector I participate in the company's paint and coating workgroups, offering support in the drafting and maintenance of the related specifications.

Together with colleagues from the service "Inventory Control & Traceability" and the C4Gas SAS - staff, I work to guarantee a defined level of quality assurance and traceability. I interact with (candidate) suppliers at different stages:

- supplier appraisal and technical qualification;
- technical review of quotations;
- technical advices before and after order placement;
- analysis of deviation requests.

In the periode 2013-2016, I was involved in the review of the Belgian Gas Act including the development of a technical code "design and construction" that lists the legal requirements for transportation pipelines and installations in Belgium. I was also involved in the implementation of the New Legal Framework Pressure Equipment Directive 2014/68/EU in the company's activities.

From November 2015 onwards, I was asked to additionally perform the role of co-ordinator "piping & mechanical". Rather than managing a team, this role focused on knowledge management within the "piping & mechanical" cluster with the purpose of

- stimulating knowledge sharing across entities;
- consolidating knowledge (in writing) for future use and to improve awareness of the impact of decisions in one entity on other entities.

Inventory Controller, Fluxys Belgium NV

I'm responsible for getting the right materials and equipment to the right place at the right time. This includes executing and monitoring Material Requirements Planning (MRP), converting order proposals, monitoring stocks and range of coverage (in terms of quantities and value of stock);

I monitor suppliers' quality assurance and how they ensure traceability;

I review technical documents like quotations, deviation requests, final manufacturing files and generic files;

I'm involved in the training and development of colleagues by either coaching new colleagues in the team or lecturing an in-house training on inventory management and traceability;

I perform supplier appraisals and qualification audits for either Fluxys Belgium NV or C4Gas SAS (joint audits for the different partners and customers);

Additionally I'm involved in the company's standardisation activities as member and back-up member of respectively the Working Group "Electricity and Instrumentation" and the Working Group "Piping";

I also attended a number of DIN 30670 and DIN 30678 meetings upon invitation of several pipe mills.

Lecturer on "role of natural gas infrastructure in H2 economy", WaterstofNet Hydrogen Academy

WaterstofNet is a knowledge and cooperation platform that wants to contribute to a carbon neutral society by supporting and realising hydrogen projects in Flanders and The Netherlands.

Their Hydrogen Academy is an initiative to provide the larger public information about hydrogen, hydrogen applications and current state of art. This happens during 5 sessions which each cover a different aspect:

- introduction to hydrogen;
- infrastructure / hardware for a H2 economy;
- transport;
- industrial and domestic applications of hydrogen; and
- getting started with hydrogen (policy & legislation; business cases; safety & permits)

My lecture is part of the "infrastructure" session, where I present together with representatives from other companies what is needed for the implementation of hydrogen in the economy (production, transport, storage & vehicle tanking facilities).

Member representative, HyReady

The HyReady Joint Industry Project provides engineering guidelines for Transmission System Operators and Distribution System Operators to support the preparation of their existing natural gas networks and operations for the injection of hydrogen. Initially limited to 30 vol% H2, the project now looks at the full range up to 100% H2 in transmission, distribution and end-user appliances, as well as storage-, injection-, separation and- refueling-infrastructure. I represent Fluxys, who is a project member since 2020.

Member representative & co-founder, H2 Gas Assets Readiness (H2GAR)

H2GAR is an initiative of 7 European Gas Transmission System Operators (Enagas; Fluxys; Gasunie; GRTgaz; National Grid; OGE & Snam) to among others:

- contribute to a robust development of new H2-related standards and technologies essential to the future gas transmission systems;
- share current technical knowlege on H2 gas asset readiness;
- build a common view on the H2 readiness of their infrastructures;...

It is organised around 6 working groups (WG1 - pipelines; WG2 - compressor stations; WG3 - separation systems; WG4 - metering; WG5 - safety - WG6 - UGS). I represent Fluxys in WG1 on pipelines.

Convenor / Member representative & co-founder, European Pipeline Coating Platform

The European Pipeline Coating Platform is a Community of Practice with regard to pipeline coating for the petroleum and natural gas industries that brings pipeline owners, coating resin manufacturers, coating applicators and researchers together to jointly formulate best practices and to jointly solve common problems.

From its creation in 2012 till 2016 I took office as secretary (title later on changed to "convenor" to better match the function's scope of work). From 2016 onwards I handed over that role to another member and continued participating as a regular member representing Fluxys till my function change in 2019.

CEN-CLC/jTC 6 on "Hydrogen in energy systems"; Sector Forum Energy Management - Workgroup Hydrogen

I'm appointed to act as Chair of the Belgian National Mirror Committee (NMC) to CEN-CLC/jTC 6 "Hydrogen in energy systems", the secretariat of which is held by sectoral operator Synergrid VZW.

Within this regard:

- I identify together with Synergrid VZW the relevant stakeholders with a legitimate interest;
- I ensure all members of the NMC have equal participation rights and equal access to relevant information;
- I attempt to achieve a balanced composition of the NMC, avoiding dominance by any stakeholder or stakeholder category;
- I act in a neutral manner to facilitate the NMC's decision-making and to ensure that all relevant stakeholders on the NMC have fair and equitable access to information, an opportunity to provide input, and that consideration of their input is given in the development of the national position.

I'm nominated by Synergrid VZW within the NMC to indicate the national position on all items during the plenary CEN-CLC/jTC 6 meetings, including indication of those cases where due to lack of briefing a national position cannot be presented. I ensure a homogenous national view is presented by all delegation members, or in those cases where this is not possible or appropriate, determining with delegation members, which view may be presented to the technical committee.

In addition to the abovementioned CEN-CLC/jTC 6 activities, I act as liaison officer on behalf of CEN-CLC/jTC 6 to GERG (the European Gas Research Group) with regard to hydrogen. I'm also member of the Working Group on hydrogen of the CEN/CENELEC Sector Forum Energy Management.

Lecturer on "pipeline coatings" in Master of Pipeline Technology programme, Avans+ MB BV

I lecture on a specific topic related to my (former) professional day-to-day activities.

Within this regard:

- I define learning objectives with regard to that topic in consultation with the Avans+ programme co-ordinator;
- I create and modify learning materials
 - to stimulate critical thinking and debate with the students;
 - to keep up-to-date with recent developments in the pipeline industry;
 - to match the implementation of new lecturing methods;
- I create and evaluate assignments, provide constructive feedback to the students and answer questions related to the topic;
- I refer to additional literature and sources of information whenever required.

Skills

Knowledge of languages:

Language	Reading	Writing	Speaking
Dutch		mother tongue	
English	fluent	fluent	fluent
French	fluent	fluent	fluent
German	scholastic	scholastic	scholastic

Computer skills:

knowledge of Microsoft Office (Word, Excel, Powerpoint, Outlook, Access) and SAP; notions of Microsoft Publisher, Microsoft Visio, AutoCAD, Adobe Indesign and Adobe Dreamweaver.

Volunteering Experience - detailed list of roles & functions

Appointments (Sailing) - International

International Measurer International Optimist Class	2011
International Measurer International 420 Class	2011
International Measurer International 470 Class	2011 - 2018
International Measurer International Cadet Class	2023

Following a training programme, successfull completion of the exam and a number of apprenticeships, I have been appointed by the World Sailing federation as International Measurer for a number of classes. As an International Measurer I lead the inspections and measurements at major regattas and I perform prototype measurements.

RORC/UNCL Official Measurer IRC

2010 - ...

Upon request of the regional sailing federation, I became "back-up" measurer for the IRC rating system in Belgium. This in order to have a sufficient number of qualified national measurers and to avoid having people measure their own boat and equipment.

KNWV Equipment Inspector

2009 - 2018

Following involvement in a number of events on Dutch territory, I participated in the curriculum of the Dutch Sailing Federation to become entitled to perform equipment inspections at their events.

Appointments (Sailing) - National

KBYV / FRBY Official Measurer International 420 Class	2008
KBYV / FRBY Official Measurer International Optimist Class	2006

An Official Measurer is entitled for a specific country to certify equipment for a specific type of boat .

In Belgium the recognition of Official Measurers is part of the activities of the Royal Belgian Sailing Federation.

BLOSO / Sport Vlaanderen Advanced Dinghy Sailing Instructor (Instructor B)	2006
BLOSO / Sport Vlaanderen Dinghy Sailing Instructor (Initiator)	2001

Sport Vlaanderen (previously BLOSO) is the institution that through its sports management school is responsible for the education and continuous development of instructor and trainers. The curriculum consists of 4 levels: basic level (initiator), provincial level (instructor B), national level (trainer B) and international level (trainer A). I did the general curriculum up to the national level and the sport-specific curriculum up to provincial level.

High level event appointments (Sailing) - International

Event Technical Committee Chair for the Paris 2024 Olympic Sailing Competition Event Technical Committee Chair for the The Hague 2023 Sailing World Championships

Event Technical Committee Vice-Chair for the Tokyo 2020 Olympic Sailing Competition Event Technical Committee Chair for the Aarhus 2018 Sailing World Championships

Equipment Inspection Vice-Chair for the Rio 2016 Olympic Sailing Competition
Equipment Inspection Chair for the Santander 2014 ISAF Sailing World Championships

The full list of events can be found on Jurgen's website.

Positions (Non-Sailing) - National

Member "Jongerenplein (Youth Council)", IRET-KIEA

2018 - 2021

The youth council is a project of the Royal Institute of Elites of Labour, underlining the commitment and attention of the Belgian Royal Court for the recognition of professional merit. It puts young people in the picture and encourages them in their careers. It is a discussion platform to hear young people and to show their potential and talent.

Positions (Sailing) - International

Member, International Measurers Sub-Committee, World Sailing International Measurers Representative, Race Officials Committee, World Sailing Member, Principal Event Guidelines Working Party, World Sailing Chairman, International Measurers Sub-Committee, World Sailing Instructor, Measurement Seminar, World Sailing Assistant Instructor, Measurement Seminar, World Sailing Instructor, Measurement Clinic, World Sailing Member, International Measurers Sub-Committee, ISAF	2021 - 2024 2017 - 2020 2017 - 2020 2017 - 2020 2021 - present 2018 - 2020 2016 - present 2013 - 2016
Chairman, Equipment Committee, World Sailing Member, Equipment Committee, World Sailing Equipment Rules Representative, Equipment Committee, World Sailing Chairman, Equipment Rules Sub-Committee, World Sailing Member, 2 Evaluation Panels for Equipment selection to the Paris 2024 Olympic Ga Member, Anti-trust review Working Party (one person dinghy M/W; windsurfing M/W) Member, Equipment Rules Working Party, ISAF / World Sailing Member, Equipment Rules Q&A Panel, ISAF / World Sailing ISAF Classes Representative, Equipment Control Sub-Committee, ISAF Member, Standard Class Rules Working Party, ISAF	
Equipment Control Representative , ISAF Classes Committee, ISAF	2013 - 2016
Member, Executive Committee, International Cadet Class Association Chief Measurer, International Cadet Class Association	2021 - present 2021 - present
Member, Technical Committee, International 470 Class Association	2013 - 2018
Member, Executive Committee, International Optimist Dinghy Association Chairman, Technical Committee, International Optimist Dinghy Association Member, Technical Committee, International Optimist Dinghy Association	2015 - 2017 2015 - 2017 2012 - 2015
Member, Technical Committee, International 420 Class Association Member, Executive Committee, International 420 Class Association (Acting) Secretary, International 420 Class Association	2016 - present 2011 - 2016 2011 - 2016
Positions (Sailing) - National	
Chairman, KBYV / FRBY Race Officials and Rules Committee	2012 - 2013

Education - details

2008 - 2012 Master of Pipeline Technology, Avans+, Breda, the Netherlands

(participation in additional Master programme proposed by Fluxys Belgium NV)

(Successful)

Individual case TP 2008-2009:

Harmonization study material specifications for high pressure pipelines

Group case TP 2008-2009:

Exploration boundaries of plastic pipelines

Individual case AP 2009-2010:

Pipeline coating: Technical-commercial characteristics and selection criteria for pipeline and field joint coating, its impact on the revision of procurement specification, and its potential role in the life of a gas transportation pipeline

Group case AP 2009-2010:

Hydrogen - freedom fuel, to be, or not to be

Thesis MPT 2010-2012:

Knowledge management with regard to external coating of buried steel transportation pipelines - a recommendation for the petroleum and natural gas industry

process coach: R. van Hattem, van Hattem management services BV

thesis coach: G. Kimus, Fluxys Belgium NV

thesis mentor: W.A.J. van der Maas, Archipel Pipeline Consultancy

2005 - 2006 Master in Industrial Management, KU Leuven

(additional thesis year stopped at the moment I started working at Fluxys Belgium NV)

field of study: PPM - Product & Production Management

elective courses: Corporate Finance

Freight Transport Management

Thesis MIM 2005-2007:

A cost-analysis of storage selection in a chemical plant and its impact on internal logistics

company: Borealis Antwerpen NV advisor: Liliane Pintelon, *KU Leuven* coaches: Alejandro Parodi, *KU Leuven*

Iris Van de Walle, Borealis

2001 - 2005 Industrial Engineer Electromechanics / Master of Science in applied electromechanical engineering, Group T Leuven Engineering College

(passed cum laude)

Thesis Ing. MSc

Simulation of a reciprocating compressor, study of reliability and capacity

company: Ineos NV

supervisors: Jos Schoeters, *Group T*

Willy Cant & Bart Janssens, Ineos

2000 - 2001 Civil Engineer, KU Leuven

(unsuccessful)

1994 - 2000 secondary education, Latin-Mathematics, St. Norbertusinstituut, Antwerpen

CPD

2023	 Leading the Move - leadership for FLM & MM, The Tipping Point Training "BA5" skilled person - generalities, ECS Building strong leadership, NCOI
2022	 OpenPlant 3D administrator training MS Project training First 2 days as a manager, PerCo Teamcoaching sessions, TeamPact Training H2 fatigue calculation tool, Ghent University
2021	- Hydrogen Academy, WaterstofNet- Fracture & fatigue failure analysis (virtual course), IOM3- Virtual Conference H2, Mannesmann Line Pipe
2020	 - Hydrogen Academy, WaterstofNet - Annual Conference "Energy Transition", IGEM - Hydrogen deblending workshop, Gas Goes Green Energy Networks Association - Pipeline Coating conference, Applied Market Information (AMI) Ltd.
2019	 Mechanical tests dedicated to H2 embrittlement of metallic materials, Cefracor Industrial Valve Summit, Confindustria Bergamo & Promoberg Pipeline Coating conference, Applied Market Information (AMI) Ltd.
2018	- Effective cross-cultural communication, Akteos France- NACE Europe Conference, NACE- EPRG day, European Pipeline Research Group (EPRG)
2017	- Pipeline Coating conference, Applied Market Information (AMI) Ltd.
2016	- "AEM Cube" mapping of individuals and teams, Human Insight Ltd.- Pipeline Coating conference, Applied Market Information (AMI) Ltd.
2015	 NACE Coating Inspector Program Level 1 course, Exova BV Intergraph Caesar II Statics course, Dynaflow Research Group BV "Train the trainer" course, Fluxys Belgium NV
2014	- Pipeline Coating conference, Applied Market Information (AMI) Ltd.
2013	- ASME Boiler & Pressure Vessel Code, Section VIII, Division 1 combo course, American Society of Mechanical Engineers (ASME) - Europe office
2012	- Pipeline Coating conference, Applied Market Information (AMI) Ltd.
2011	 - Pipeline Coating conference, Applied Market Information (AMI) Ltd. - training Belgian Gas Act, Vinçotte NV - seminar Pibiviesse, Econosto België NV / Econosto Nederland BV - co-organisation and attendance seminar Salzgitter Mannesmann Forschung & Europipe Avans+ MB BV
2010	 personal assessment and development advice based on among others the Quinn mode Avans+ MB BV initiation PLE4Win software, Avans+ MB BV (pipeline strength and stability analysis calculation software) technical conference, Pentair (formerly Tyco) Valves & Controls Italia srl seminar ASME BPVC section VIII, Div 1 & 2, BIL/IBS VZW & Sirris VZW

(Honorary) memberships, professional qualifications & designations

Belgian memberships

- Association of Flemish Engineers (ie-net/VIK), Antwerpen, Belgium Member

- Royal Yacht Club of Belgium, Antwerpen, Belgium

Member

- Alumni Lovanienses, Leuven, Belgium Member

Foreign memberships

- Institution of Gas Engineers & Managers (IGEM), Kegworth, United Kingdom Chartered member

- The Chartered Quality Institute (CQI), London, United Kingdom

Affiliate member

- Institute of Materials, Minerals & Mining (IOM3), London, United Kingdom

Affiliate member

- AMPP (formerly NACE International), Houston, USA Member

- ASME, New York, USA Member

Honours, awards and distinctions

- European Engineer [EUR ING] (2022), FEANI
- Chartered Engineer [CEng] (2022), Engineering Council (UK)
- Sailing Manager of the Year (2021), Belgian Sailing (KBYV-FRBY)

 "in recognition for my role during the Tokyo 2020 Olympic Sailing Competition and within World Sailing"
- Nominee Yachting Manager of the Year (2017, 2018 & 2019), Royal Belgian Yachting Federation (KBYV-FRBY)
- Nominee Yachting Manager of the Year (2016), Royal Belgian Yachting Federation (KBYV-FRBY)
- Bronze Honour Badge of Labour / Laureate of Labour of Belgium Label "Professional" (2015)

 Professions & specialisms of the Engineer Master of Science

 Royal Institute of the Elites of Labour
- Nominee BIG Award (2013)

 Buisleiding Industrie Gilde (BIG) pipeline industry association for Belgium and the Netherlands

in be.linkedin.com/in/jurgencluytmans

jurgencluytmans

(i) @jurgen.cluytmans