



Metrology for Green Maritime Shipping:
Emission control through traceable measurements and
machine learning approaches



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Opening Message



Dear readers,

As the maritime industry continues to navigate the transition toward a more sustainable future, transparency and accountability have never been more important. At the heart of this journey lies one essential element: measurement.

With the implementation of FuelEU Maritime and draft IMO ZNZ Framework, the ability to accurately measure fuel usage, emissions, and energy performance is not just a technical necessity, it is the foundation of trust. Measurements provide the data needed to demonstrate compliance, drive continuous improvement, and foster confidence among regulators, operators, and stakeholders alike.

In this edition, we delve into how our objectives are supporting this transition in the maritime sector and also inform you about our progress so far in the 8 months. We would like to share the spotlight about the 4 partners in the consortium and the key people behind the activities. One can also get the opportunity to meet us in person at the events that we will be participating this year. Finally, there is an article from the collaborator Siemens, authored by Mr. Piotr Strauch on how they decided to work with the consortium and why the collaboration topic is of interest not only to Siemens but to the larger community.

Enjoy the first edition of our newsletter and do give us your feedback, whether it is positive or negative, we would like to hear from you.

Let us measure what matters—because confidence in compliance starts with clarity in data.

Ahoy!

The MaritimeMET Project Team

About the Project

The maritime industry plays a vital role in the global economy, facilitating over 80% of international trade by volume. In today's interconnected world, the efficiency and resilience of global shipping routes are more critical than ever—supporting supply chains, ensuring access to essential goods, and enabling economic development across continents. As geopolitical shifts, climate impacts, and rising consumer expectations reshape trade patterns, the need for a sustainable maritime framework has become both urgent and unavoidable.

At the same time, large enterprises across sectors are committing to ambitious sustainability targets, often structured around reducing Scope 1, 2, and increasingly Scope 3 emissions. For many, maritime transport represents a significant portion of their extended carbon footprint. As these enterprises push toward carbon neutrality, they place new demands on shipping companies, ports, and equipment suppliers to decarbonize their operations and provide verifiable emissions data.

One of the most effective strategies to meet these demands is the development and deployment of high-efficiency engines capable of running on sustainable fuels such as methanol, ammonia, hydrogen, or biofuels. These advanced propulsion systems, when paired with intelligent design and operational efficiencies, offer a path toward reducing direct emissions at scale.

Equally important is the ability to monitor and measure emissions accurately. Digital technologies and onboard monitoring systems bring transparency and accountability, giving confidence to

cargo owners, regulators, and the broader market that sustainability claims are real, traceable, and progress-driven. These technologies enable continuous improvement, data-driven decision-making, and compliance with evolving international regulations. This project is designed to support the maritime industry in accelerating this transition, by aligning technical innovation with practical deployment, and by ensuring that sustainability goals are met without compromising reliability or global connectivity.

Read about FuelEU Maritime Regulation



Regulatory Momentum and Global Alignment – The transition toward a greener maritime sector is being reinforced by regulatory momentum at both regional and international levels. The European Union is leading with strong policy frameworks such as the FuelEU Maritime Regulation and the EU Emissions Trading System (ETS), which now includes maritime emissions. These instruments are designed to create financial incentives for cleaner shipping operations and push the industry toward low- and zero-emission technologies.

Read about IMO ZNZ Framework



Internationally, the International Maritime Organization (IMO) has also set out revised greenhouse gas reduction targets, aiming to achieve net-zero emissions from international shipping by around 2050. These frameworks signal a clear direction and provide the regulatory certainty needed for long-term investments in green maritime technologies.

About the Project

The project kick-started at the right time when the maritime industry is transitioning in the right direction and would need support from all relevant services. In this aspect, metrology is key for both maritime players and regulatory authorities.

Project Objectives – in simple terms

Measuring Emissions from Cleaner Fuels
We aim to develop better ways to calibrate instruments that measure harmful gases and particles (like nitrogen oxides, ammonia, carbon monoxide, and black carbon) that come from engines running on cleaner, alternative fuels such as methanol and ammonia. These new measuring tools, including affordable sensors, will be tested in laboratory and real engine environments. We'll also identify what could affect the accuracy of these measurements and use the results to help improve how emissions are predicted using modern tools like machine learning.

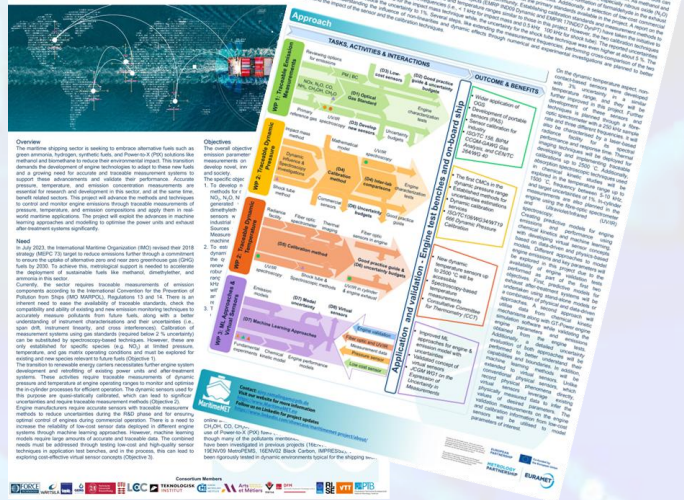
Monitoring Engine Conditions More Accurately
To help engines run more efficiently and cleanly with renewable fuels, we need to understand what's happening inside them—like how pressure and temperature change during operation. We will create accurate systems that can calibrate sensors that operate at these extreme conditions (e.g., dynamic pressure and temperature). These systems will be tested and compared across different labs to make sure they're reliable.

Creating Smart Models to Predict Emissions and Performance.

Using data from the first two objectives, we will build smart computer models that can predict how engines perform and what emissions they produce.

Metrology for Green Maritime Shipping

Emission control through traceable measurements and machine learning



Download Project information material

Below is the composition of the consortium that will handle the different aspects in the project.

Consortium Members

- 8
National Metrology Institutes (NMIs) and Designated Institutes (DIs)
- 5
Universities and Research Organizations
- 5
Industrial Partners (3) & Collaborator (2*)

Project so far

As part of the [European Partnership on Metrology Programme](#), [Euramet](#), the [regional metrology organization \(RMO\)](#) of Europe launched 4 thematic areas in 2023, namely fundamental metrology, metrology for Industry, metrology for pre- and co-normative research, and research potential. The thematic areas and their scope changes according to the evolving needs from the different sectors. The [industry call scope](#) focused on developing the right metrological tools, methods and techniques to support industrial sectors with the background on sustainability, digital transformations through the use of advanced tools like artificial intelligence (AI). In early January 2023, various members of the National Metrology Institutes (NMIs) along with industry and research partners started to draft proposal objectives focusing on different emerging topics.

In the backdrop of the [European Metrology Network – Energy Gases](#) brainstorming meetings, a requirement from a key stakeholder focusing on the shipping industry arises. A small think-tank, consisting of members from NMIs and research partners took on the initiative to draft the proposal objectives that cater to the growing requirements in

the shipping sector, especially with regard to green technologies and reducing GHG impact from the sector. With a positive outcome, stage 1 of the proposal was approved and stage 2 required building a strong consortium that can cater to addressing the proposed objectives. A funneled approach through online partnering meetings, frequent discussions with interested partners lead to co-drafting the joint research proposal (stage 2) followed by defending the objectives and approaches to a distinguished committee at the review conference in Amsterdam, Netherlands.

Fresh start to 2024 and great news to the [MaritimeMET consortium](#), the project was selected for signing the Grant Agreement. Thanks to the legal team of all partners, Euramet Management support unit, and consortium partners the process towards signing the Grant Agreement went efficiently. This meant that the project could officially start in September 2024. After approximately a year and a half, the consortium partners had the opportunity to meet in-person at Physikalisch-Technische Bundesanstalt (PTB) campus, the national metrology institute of Germany.



Project so far



Prof. Dr. Daniel Prades | TU Braunschweig
Integrated Light for Distributed Sensing and Metrology: Applications to Emissions Monitoring

Ajoy Ramalingam to visit Wärtsilä research center and understand their testing competences and facilities that will be used for the project. Thanks to [Anders Öster](#) and [Mika Kerojoki](#) for making this happen and being a great host. We have had great support from stakeholders right from the JRP phase and we wanted to engage with them and share the project plan and possible

Prof. Dr.-Ing., Alexander Heufer | RWTH Aachen University
Dynamic Pressure Measurement in Shock Tubes



Mr. Piotr Strauch | Siemens AG
Process Analytical Technology: (R-) evolution towards next level emission monitoring

The agenda involved invited talks, revisiting the proposed tasks and activities from the project plan and majorly networking among the partners. Thanks to [Prof. Dr. J Daniel Prades](#), [Prof. Dr.-Ing. Alexander Heufer](#) and [Mr. Piotr Strauch](#) for their insightful talks and discussions on Sensors for emission monitoring, dynamic pressure measurement in shock tubes, Process analytical technologies and its use in emission monitoring. A great evening at Braunschweig City Center organized by [Ms. Judith Krakowski](#) and laboratory visits the next day summed up the kick-off meeting.

outcomes from the project that will be useful for them and the industry as a whole. The first stakeholder meeting was advertised for possibility to include more interested stakeholders, and previous stakeholders were invited to the event. An overwhelming response of 60+ registrations and participation of 20+ companies, institutes and organizations led to the success of the meeting in December 2024. The discussions and perspectives shared during the Q&A session from [Conor Fürstenberg Stott](#) | Fürstenberg Maritime Consulting, [Sotiris Topaloglou](#) | WinGD, [Juha Schweighofer](#) | Viadonau, [Valentina Bortuzzo](#) | Zero Carbon Shipping and [Jari Hyvönen](#) | Wärtsilä were very useful for the consortium partners.

In the first months, the project logo, website, and the linkedin page were established to ensure project recognition and platforms for dissemination of the project activities and outcomes. The project coordinator had an opportunity to visit [VTT-MIKES](#), the national metrology institute of Finland and work with [Dr. Richard Högström](#), [Dr. Antti Lakka](#) and [Mr. Jussi Hämäläinen](#) to understand their drop weight methods for dynamic pressure sensor calibrations. Proximity to Vaasa led to Dr. Richard Högström and



**STAKEHOLDER
ADVISORY
BOARD**



Project so far

After a brief winter break and holiday season, the consortium partners went back to their busy lives as scientists and project managers. One take away from the stakeholder meeting was that there is immense interest from them to share their perspectives and this would largely help the metrologists in addressing their requirements in future projects or partially in current projects. Therefore, the project team decided to engage frequently with the stakeholders through different channels. The first in this direction was organizing Webinar series, where the stakeholder has more time to present about their products and their requirements with regard to the maritime industry. [Ms. Friederike Hesse](#) provided insights into the FuelEUMaritime regulation and how availability of accurate data could benefit the sector with regard to compliance.

Going forward we have advertised these options to more stakeholders and lined up a series of webinars. The next in line was the [communication interview](#) with [Mr. Stephen Harrison](#), Managing Director from sbh4 GmbH and the project team consisting of Dr. Zhechao Qu, Dr. Tamara Sarac and Dr. Ajoy Ramalingam.

Mr. Stephen B Harrison
Managing Director – sbh4 GmbH
Methanol and ammonia – high-potential, emerging clean fuels.



sbh4

[Watch the webinar here](#)



Mr. Harrison has been ardent supporter of many sustainability projects and has immense expertise and background in these topics. His webinar was the second in our series held in June 2025 that focused on Key metrological implications of high potential emerging clean fuels and their value chains with emphasis on end-use cases like maritime propulsion and thermal power generation. Additionally, he has drafted his perspective on this topic in two online platforms, [Petrochemical Chemical & Energy \(PIN\)](#) and [EnviroTech](#).

[Read the opinion articles here 1, 2](#)



In June, the month 9 review meeting was hosted by [LEC](#) at their institute in Graz through a hybrid format and some of the partners were able to visit their [engine testing facilities](#) and also attend the [LSSTF](#) event on the subsequent day.



Ms. Friederike Hesse
Co-founder and Managing Director at Zero44
Emission regulations in the Maritime Industry and Implications for fuel supply

ZERO44

[Watch the webinar here](#)



To document the needs and requirements and further draft a metrological roadmap in the shipping sector, we requested Ms. Hesse and her colleague [Ms. Sandra Bronsvort](#) to draft an opinion article focusing on their specific needs and broadly also the sector requirements that can be addressed in future projects.

[Read the opinion article here](#)



Past Events

Past Events

IMEKO 2024 XXIV World Congress

26 – 29 August 2024 | CCH – Hamburg, Germany

The project poster was presented by the coordinating team [Dr. Ajoy Ramalingam](#) and [Dr. Zhechao Qu](#) from PTB as part of the TC 20 - Measurements of Energy and Related Quantities. Additionally, the coordinating teams and a few consortium members ([Dr. Fredrik Arrhén](#), RISE and [Dr. Richard Högström](#), VTT-MIKES) were present to participate in the talks organized by TC 16 Pressure and Vacuum Measurement.



Mass and Related Quantities

Euramet Technical Committee for Mass and Related Quantities INRiM Torino, Italy between 7th and 11th October 2024

Representatives from the MaritimeMET consortium, [Dr. Fredrik Arrhén](#) from RISE and [Dr. Richard Högström](#) from VTT-MIKES attended the meeting and presented the project objectives and discussed with committee members about the planned approaches and expected outcomes from the MaritimeMET project.

Visit to TU Eindhoven

22 – 23 January 2025 | Eindhoven Netherlands

The coordinating team [Dr. Ajoy Ramalingam](#), [Dr. Zhechao Qu](#) and [Dr. Bo Shu](#) from PTB visited the group of power and flow hosted by [Asst. Prof. Xiaocheng Mi](#), [Asst. Prof. Conrad Hessels](#), and [Dr. Roy Hermanns](#) to discuss about possibility of measuring in-situ gaseous species measurement in industrial scale reactors available at TU Eindhoven and at Metalot.



Euramet Energy Gases Workshop & General Body Meeting VSL , Delft Netherlands, 25 – 27 March 2025

The coordinating team from PTB presented briefly about the project activities, their contributions and expectations to and from EMN Energy Gases in the [Annual General Body Meeting](#). Additionally, [Dr. Javis Nwaboh](#) and his team attended the EMN Energy Gases workshop and presented the project objectives to the wider audience through a poster presentation. [Dr. Ajoy Ramalingam](#) had the opportunity to introduce the project and highlight the nexus between the project and scope of EMN Energy Gases.

Past Events



International Conference on Measurements of Energy (ICME)

23rd to 25th June 2025 | Órleans France

ICME is an IMEKO TC20 endorsed event providing an international forum of collaboration in energy-related metrology. The goal of the conference is to encourage the global exchange of scientific and technical information related to measurement and instrumentation and to foster collaboration among scientists and engineers in both research and industry on an international scale. Project partner ENSAM / AMVALOR, represented by [Dr. Christophe Sarraf](#) presented the activities on dynamic pressure sensor calibration methods and planned outcomes from the MaritimeMET project. Additionally, [Dr. Madlen Chao](#) and [Dr. Bo Shu](#) presented the project to participants with the help of the project poster.



LEC Sustainable Shipping Technology Forum

25 th June 2025 | Graz Austria

LSSTF is a technology-driven forum founded in 2019 and hosted by LEC in cooperation with [Hamburg Port Authority](#) together with its subsidiary [Flotte Hamburg](#), the forum has become a leading European platform for green maritime innovation. The coordinating team and a few partners will be present at the forum to engage with industrial stakeholders and understand the outcomes of other similar projects in the Maritime Sector. [Ajoy Ramalingam](#) presented the project at the event through a talk and also participate as a panelist at the event. Additionally, [Zhechao Qu](#) , [Carsten Hansen](#) , [Stefan Posch](#), [Christian Laubichler](#), [Gerhard Pirker](#) participated in the event to discuss potential synergies with other stakeholders and project consortiums.



Meet us @

VUP-Calibration excellence Days 2025

11th to 12th September 2025 | Leipzig, Germany

The VUP-Calibration Excellence Days 2025 will start in the trade fair city of Leipzig and promise a unique event for the entire metrology industry. Under the motto "Shaping the future of metrology together", you can expect a varied program with specialist lectures, a practice-oriented academy and a variety of opportunities to exchange ideas with leading experts. On the first day of the event, [Dr. Richard Högström](#)(VTT) from the National Metrology Institute of Finland will offer in-depth insights into current developments in dynamic measurands and activities in the MaritimeMET project.



Upcoming Events

IMEKO Joint Conference TC8 – Traceability in Metrology, TC11 Measurement in Testing, Inspection and Certification, TC 24 Chemical Measurements

14th – 17th September 2025 | Torino, Italy

This international conference aims to gather experts both from industry and academia, covering different topics from the wide interdisciplinarity of the three Technical Committees, many topics and metrological issues will be addressed during the Conference, including (but not limited to): certified reference materials, digitalization in Traceability, digital twins, quality management and conformity assessment in TIC Sector, chemical and biochemical sensors, gas analysis for climate change and energy transition, chemical metrology. Dr. [Zhechao Qu](#) (PTB), will be presenting the activities on spectroscopic measurements of target species at the TC 24 event.



TEMPMEKO ISHM Symposium 20 – 24th October 2025 | Reims France

The “Joint International Symposium on Temperature, Humidity, Moisture and Thermal Measurements in Industry and Science” – TEMPMEKO - ISHM 2025 is one of the most important international scientific events held every three years under the auspices of TC12 IMEKO – International Measurement Confederation and CIPM Consultative Committee for Thermometry Working Group Humidity. Dr. [Matthijs Panman](#) (VSL), Dr. [Michal Voldan](#) (CMI), Dr. [Eynas Amer](#) (RISE) and Dr. [Alexander Fateev](#) (DTU) have jointly planned with a contribution to a poster based on the MaritimeMET project activities on Dynamic Temperature measurement and calibrations.



The Sixteenth International Conference on Sensor Device Technologies and Applications SENSOR DEVICES

26-30th October 2025 | Barcelona, Spain

The event SENSORDEVICES 2025 continues a series of events focusing on sensor devices themselves, the technology-capturing style of sensors, special technologies, signal control and interfaces, and particularly sensors-oriented applications. Project partner ENSAM represented by [Dr. Christophe Sarraf](#) will be presenting the activities on dynamic pressure sensor calibration methods and planned outcomes from the MaritimeMET project.



Partner Spotlight



DTI is the [Danish Technological Institute](#). DTI will provide engine test bed facilities where the combustion of alternative

fuels (methanol and ammonia) can be tested for marine engine-like conditions. One heavy-duty (truck engine) cylinder is used for testing dual fuel and premixed combustion of alternative fuels. The engine will generate emission and operating data for emission modelling and machine learning activities and will serve as a platform for testing different novel and low-cost exhaust gas sensors.



[Rasmus Faurkov Cordtz](#) is a senior consultant at DTI and holds a Ph.D. from the Technical University of Denmark. Has expertise in internal combustion engines, fuels and formation of exhaust gas emissions and advanced phenomenological modelling of exhaust species formations



[Morten Warming-Jespersen](#) is the head of center at the Danish Technological Institute, where I lead 25 specialists in the green transition. Together, we help the Danish industry with the green transition through electrification and advanced fuels.

[VSL](#) is the Dutch national metrology institute that develops and maintains the Netherlands' primary standards for thermometry and optics (among many others). In WP2, VSL will develop a thermometric radiation-based fibre-optic spectrometer reference standard for dynamic in-engine gas temperature measurements. Additionally, VSL will further develop its pulsed laser-based radiance facility to provide temporal and radiance traceability for characterising the reference standard. In WP3, the Data Science and Modelling group at VSL will quantify the uncertainty of the prediction of the emission models.



[Matthijs Panman](#) (scientist, PhD, WP2) joined VSL as an experimental scientist in August 2021. He has a strong background in time-resolved spectroscopy and scattering techniques. Currently, he specializes in measuring the temperature and water content of humid gasses



[Federica Gugole](#) (scientist, PhD, WP3) joined VSL as a Data Scientist in July 2021. She has a strong mathematical background and specialises in machine learning, statistical analysis and uncertainty quantification



Partner Spotlight



TUBS is the Technische Universität Braunschweig. The Institute of Internal Combustion Engines and Fuel Cells (IVB) is involved in this project. TUBS is well experienced in experimental and theoretical engine investigations, including large bore engines. TUBS will develop models for combustion and emissions involving machine learning algorithms.



Joachim Jaensch is also a research assistant at the institute of combustion engines and fuel cells at Technische Universität Braunschweig. Together with Lukas he will work on the Machine Learning model development for predicting emissions from greener fuels and novel engine concepts.



Lukas Knowles-Wilkinson is a research assistant at the institute of combustion engines and fuel cells at Technische Universität Braunschweig. His area of expertise is on numerical modeling of raw emissions in internal combustion engines used in transportation sector.



Prof. Peter Ilts has 16 years of experience in the large bore engine industry and 18 years of experience as head of the institute. His major research focus is the engine working cycle, including combustion, emissions, charge exchange and turbocharging.

ENSAM is the French DI that develops and maintains the French standards for dynamic pressure metrology since 1981. It has shock tubes, chronometric shock tubes and fast opening for dynamic pressure calibration and will contribute to WP2 by further developing its shock tube and fast-opening devices to measure dynamic pressure with reduced uncertainties to meet the industry's new requirements.



Christophe Sarraf has 10 years of experience in dynamic pressure calibration. He is also the head of Designated Institute LNE-ENSAM that focused on dynamic calibration activities.



Stakeholder Engagement

Share with us

As the global maritime industry navigates a critical transition toward sustainable and low-emission operations, the path forward requires collaborative effort, innovation, and clear communication among all stakeholders.

Decarbonization, digitalization, and regulatory compliance are reshaping the maritime landscape. From shipping companies and port authorities to equipment manufacturers and service providers, every stakeholder faces unique challenges—from adopting alternative fuels and retrofitting vessels, to optimizing supply chains and meeting evolving international standards like those from the IMO and EU.

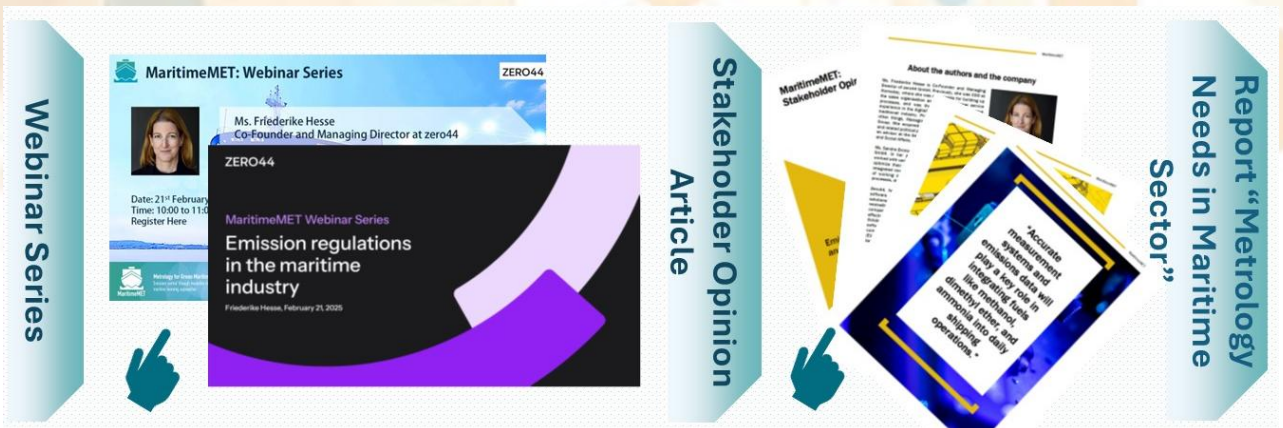
To effectively support this transition, we invite industry stakeholders to actively communicate their specific needs, pain points, and aspirations with us. Whether your focus is on technology integration, funding and financing mechanisms, workforce upskilling, or regulatory alignment, your input is essential to ensure that our solutions and strategies are aligned with the realities of the sector.

How to Engage with Us:

Structured Feedback Channels: Participate in our project meetings, webinar series, opinion article, stakeholder questionnaires, and workshops designed to capture the diversity of stakeholder needs and also learn what we plan to provide as outcomes from the project. Below is our first step in this direction. Kindly reach out to us.

Direct Dialogue: Reach out through designated contact points and we can schedule bilateral meetings to share detailed insights and challenges.

By fostering transparent, two-way communication, we aim to tailor our support and co-develop impactful pathways toward a resilient, efficient, and environmentally responsible maritime future. Let's move forward—together.



Perspective

Embracing AI in the Process Industry – Opportunities, Challenges, and the Path Forward



SIEMENS

Mr. Piotr Strauch | Siemens AG

Process Analytical Technology: (R-) evolution towards next level emission monitoring

studied Computational Physics at AGH University of Technology in Cracow, Poland and later worked as a scientific employee at the University of Heidelberg in the field of Physical Chemistry & Analytics before transitioning to the industry. He then joined Siemens, focusing on R&D for the development of analytical devices, particularly gas chromatographs. He primarily led the “Technology and Analytics” team. He currently serves as Innovation & IP Manager in the Measurement Intelligence department, part of Process Automation within Digital Industries. He also serves as the Vice Chair of the German Standardization Committee “Gas Analysis” at DIN and is a Member of the ZVEI Group for Communication for Gas Analyzers.

About Measurement Intelligence Department at Siemens AG

The “Measurement Intelligence” department at Siemens focuses on providing comprehensive solutions for the process industry.

Their emphasis is on integrating process instrumentation, process analytics and digital solutions.

Key Focus Areas:

1. **Process Instrumentation:** Measurement solutions for pressure, temperature, flow, level, and weight, complemented by positioners and communication devices.
2. **Process Analytics:** Managing complex gas analyses and monitoring emission with innovative technology.
3. **Digital Solutions and Smart Applications:** Enhancing process insights, improving plant operation, and enabling preventive maintenance.
4. **Novel products based on IoT and Soft Sensing leverage potential of AI to:**
 - Analyze process data and provide real-time insights.
 - Optimize maintenance processes and minimize downtime.
 - Promote sustainable processes, such as emissions monitoring and circular economy initiatives.

Perspective

Embracing AI in the Process Industry – Opportunities, Challenges, and the Path Forward

The emergence of ChatGPT has brought artificial intelligence (AI) into the public spotlight, but AI - particularly its subset, machine learning (ML) - extends far beyond conversational tools. It is a rapidly evolving technology field with transformative potential across industries, including the process sector. While enthusiasm and skepticism coexist, the momentum of AI development is undeniable, and its applications are expanding steadily.

In the process industry, the drive to enhance efficiency, reduce risk, and optimize operational costs is constant. AI technologies offer promising solutions to these demands, enabling varying levels of autonomy and unlocking new capabilities. One such application is the use of soft sensors - ML-based models that generate “virtual measurements” from existing process data. These tools can supplement or even replace physical sensors, offering redundancy, anomaly detection, and cost-effective alternatives to expensive instrumentation. Soft sensors exemplify how AI can deliver tangible value. Predictive Emission Monitoring Systems (PEMS), for instance, use soft sensing to monitor and optimize emissions, supporting both regulatory compliance and sustainability goals. However, implementing such solutions at an industrial scale is not without challenges. Technical limitations, long-term reliability, and risk mitigation must be addressed to ensure robust, trustworthy systems.

A key concern is the uncertainty and traceability of ML-based solutions compared to conventional measurements. Collaboration with metrological institutes is essential to develop standards and methodologies that ensure solution integrity. While some national and international standards exist, the pace of AI advancement demands continuous refinement and expansion of these frameworks.

Beyond technical hurdles, AI and data-oriented projects require a shift in execution strategy. Unlike traditional engineering projects, ML initiatives thrive on iterative development, close collaboration, and adaptability. Teams must align on shared goals and remain agile in the face of evolving challenges.

The MaritimeMET Project embodies this spirit. As activities ramp up, the collaborative energy and commitment of the team are driving innovation forward. It's inspiring to work alongside a community that embraces change and actively shapes the future of AI in industry.

Many thanks to the team for their outstanding collaboration in this pioneering endeavor.

Piotr Strauch