

2025

INDUSTRY DAY

Agile and Resilient Industry powered by
Standardized Digital Ecosystem

～標準化されたデジタルエコシステムによる俊敏で強靱な産業へむけて～

as Part of the 90th ISO/TC 184/SC 4 (Industrial Data Committee) Plenary Meeting

WED

2025.10.29 9:00 — 18:00

Conference Room 103 / Dejima Messe Nagasaki 1F

Address: 4-1 Onoue-machi, Nagasaki City, Nagasaki Prefecture 850-0058

Location: Adjacent to JR Nagasaki Station

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In recent years, the manufacturing sector has encountered significant challenges, including achieving interoperability of product lifecycle data across organizations and borders, addressing global agendas such as carbon neutrality and the circular economy, and responding to rapidly changing and unpredictable societal conditions like the COVID-19 pandemic and the conflict in Ukraine. The solution to these challenges lies in the comprehensive intellectual utilization of data within the digital space. However, this necessitates international consensus among a wide range of stakeholders, thus rapidly elevating the importance of international standards.

We are pleased to announce that the 90th ISO/TC 184/SC 4 plenary, one of the largest committees responsible for international standardization concerning industrial data, will be held in Nagasaki City. This notice serves as an invitation to the “Industry Day,” a full-day public conference scheduled to take place on the central day (October 29) of the week-long event. The purpose of Industry Day is to showcase the latest innovations and trends in manufacturing through presentations and discussions, facilitating an exchange of insights and opinions between international standards experts and the host country’s industry leaders.

SC 4 is responsible for developing various critical standards that underpin the promotion of digital transformation in the manufacturing industry. These include international standards such as STEP (ISO 10303 series), JT (ISO 14306), and QIF (ISO 23952) for 3D data, as well as ISO 15926 and ISO 23726 series for semantic interoperability of lifecycle data for large-scale infrastructure facilities like plants. Additionally, SC 4 develops the ISO 8000 series, the data quality standards serving as the sister standards to the ISO 9000 series, providing universal and horizontal standards for data quality.

This year’s Industry Day is themed “Agile and Resilient Industry Powered by Standardized Digital Ecosystem,” featuring 12 lectures by leading experts in the field. We have also scheduled networking opportunities, and we encourage you to take advantage of this valuable occasion.

Chair, SC 4 Japan National Committee
President/COO/CTO, ELYSIUM Co., Ltd.
Atsuto SOMA

TIME TABLE

TIME	PROGRAM	REMARKS
9:00-9:20	Guest Speech Mr. Nakano Shingo, Director, International Standardization Division, Innovation and Environment Policy Bureau, Ministry of Economy, Trade and Technology(METI) Mr. Shiro Suzuki, Mayor of Nagasaki City Dr. Ikuo Yamamoto, Vice President, Nagasaki University Mr. Satoshi Abe, Chief Executive Director, Manufacturing Science and Technology Center (MSTC) Mr. Kiyotaka Terajima, President, Engineering Advancement Association of Japan (ENAA)	
9:20-9:50	PLM Interoperability and the Untapped Value of 40 years in Standardization	Mr. Kenneth Swope
9:50-10:20	How Product Data Standards Drive Digital Thread and Digital Twin Adoption	Mr. Jean Brangé
10:20-10:50	Data integration across digital ecosystems	Dr. Timothy King
10:50-11:20	DX Upgrade with Generative AI and the Uranos Ecosystem	Dr. Shinichi Urakawa
11:20-12:15	Lunch Break	
12:15-12:45	Development Process Innovation with Digital Engineering in Commercial Aircraft Industry	Mr. Hiroshi Nagakura
12:45-13:15	Adaptive manufacturing of very large products using a Digital Twin Engine for multinational collaboration	Dr. Martin Hardwick
13:15-13:45	Issues in Data Interoperability between OEMs and Suppliers in the Japanese Automotive Industry	Mr. Fumiki Ohtani
13:45-14:15	From Linked Data to Live Collaboration: Advancing Engineering Collaboration with CDT, LCE, and Catena-X	Dr. Max Ungerer
14:15-14:45	Advancements in Digital Twins and Data Utilization in plantOS	Mr. Kazuya Furuichi
14:45-15:00	Coffee Break	
15:00-15:30	Getting Engineering Data Right for Digital Thread	Dr. L.C. (Leo) van Ruijven
15:30-16:00	Artificial Intelligence and Advance Work Packages in Oil & Gas Industry (From Documents to Data)	Mr. Mikitaka Hayashi
16:00-16:30	SMART Maintenance and the ISO 23726 Ontology based interoperability standards	Dr. Melinda Hodkiewicz
16:30-17:00	Smart TBM (Tunnel Boring Machines) : Toward the Future with Standardization	Dr. Dan Liu
17:00-17:30	A Holistic Framework for Ecosystem-wide Interoperability in Smart Facilities for Multi-functional Integration	Dr. Youngsoo Jung
17:30-17:40	Closing	Mr. Atsuto Soma

01 PLM Interoperability and the Untapped Value of 40 years in Standardization

Mr. Kenneth Swope

The ISO 10303 standard, known informally as “STEP” , which stands for “Standard for the Exchange of Product model data,” turned 40 in 2024. In 1999, The National Institute of Standards and Technology called it “The Grand Experience” with the introduction of a formal modeling language for product data, information models presented as requirements, and models suitable for conformance testing. While the original use case was open-source data exchange between proprietary CAD systems, the standard has grown to encompass the entire product lifecycle and enable use cases including supplier collaboration, semantic manufacturing, and long-term archiving. Due to its expansive scope ISO 10303 is subdivided into approximately 700 underlying standards. Indeed, the standard is one of the most utilized standards for transmitting product data ever developed.

Based on the success of this standard and many more in Digital Engineering, its time to adapt to today’ s emerging technologies like graph, service orientation, artificial intelligence, and ontological reasoning systems. Have we prepared enough for the future? Has the achievement of the investment of the last 40 years reached its expiration date? We will look at what made the standards in ISO/TC 184/SC 4 the success they have become and reflect on whether those conditions still exist today in the context of digital transformation and where SC 4 standards have the potential to go in the future.

02 How Product Data Standards Drive Digital Thread and Digital Twin Adoption

Mr. Jean Brangé

The ISO 10303 STEP standard is the backbone of digital product data exchange, increasingly deployed across industries to support product lifecycle continuity, digital thread, and long-term archiving. In 2025, AP242 Edition 4 was published, and the Open STEP Viewer initiative emerged to broaden adoption. Looking ahead, AP242 Edition 5 (2027) will extend PMI (sheet metal, welding, fasteners), EWIS, composites, and Isogeometric Analysis, with closer alignment to MBSE. The roadmap also presents the updated STEP SMART framework and the growing role of AI in engineering and standardization.

03 Data integration across digital ecosystems

Dr. Timothy King

Legacy engineering programmes have benefitted from “digitization” , creating islands of automation. These islands inhibit information sharing and lead to inflexible, high-cost integration of new digital capability. Programmes need a transformed approach, enhancing scope and scale of evidence-based decision-making and rapid, secure exploitation of emerging digital technologies. This approach connects digital environments to achieve a digital ecosystem, evolving with need and achieving widespread sharing of digital data. Such ecosystems are enabled by rules and supporting common services to implement integration of digital services from different partners across the ecosystem. The benefits are improved programme performance and capability of delivered engineered products.

04 DX Upgrade with Generative AI and the Uranos Ecosystem

Dr. Shinichi Urakawa

In recent years, industrial sites have been advancing business transformation through DX, but these efforts often remain confined to internal operational reforms within companies. With cross-company collaboration gaining momentum, it is anticipated that industrial structure transformation will progress. Centered around the Uranos Ecosystem promoted by the Ministry of Economy, Trade and Industry (METI), an infrastructure concept for inter-company transactions and data integration has been established. Simultaneously, the utilization of generative AI represents an innovative technology that accelerates these efforts and is viewed as a key component that will significantly upgrade future DX. This paper systematically surveys these complex environmental changes and examines the direction the industrial sector should pursue going forward.

05 Development Process Innovation with Digital Engineering in Commercial Aircraft Industry

Mr. Hiroshi Nagakura

The current global landscape of the civil aviation industry is shaped by steady economic growth, stricter certification processes and the trend toward decarbonization and sustainability. Additionally, the electrification and software integration in aircraft is making systems increasingly more complex. Moreover, recent development projects often involve global collaboration across multiple locations and organizations, leading to a more diverse development environment. In response to these changes, there is a growing worldwide movement to improve development efficiency using digital technologies. In this presentation, I will highlight the efforts to make more efficient and flexible development and manufacturing processes by utilizing various digital technologies throughout the entire aircraft lifecycle.

06 Adaptive manufacturing of very large products using a Digital Twin Engine for multinational collaboration

Dr. Martin Hardwick

In traditional CAM we program a CNC machine. In Digital Manufacturing (DM) we program a digital twin. In this presentation we discuss how SC4 is enabling digital twin programming using three standards. The first is STEP AP242 which lets you create universal product models. The second is STEP AP238 which lets you create manufacturing solutions using product specific libraries. The third is ISO 23247 which lets you monitor your manufacturing solutions as they run on manufacturing machines. For example, to make a wing you drill thousands of holes into an airframe. In CAM you program operations to drill holes, but the holes are the same for every copy. In Digital Manufacturing you program digital twins of the manufacturing holes. The twins model a stack-up of the materials. Therefore, the drilling process varies with the thickness of each layer in the stack-up. This saves time, reduces tool wear, and improves quality. We will use the drill and fill example to show the advantages of digital twin programming using the SC4 standards, and illustrate the challenges.

07 Issues in Data Interoperability between OEMs and Suppliers in the Japanese Automotive Industry

Mr. Fumiki Ohtani

I report the activities of the taskforce on data interoperability in digital engineering (DE) of the DE Subcommittee, JAMA (Japan Automobile Manufacturers Association), which has been active since 2022.

This article reports on the current state / issues of MBD (Model Based Definition) data distribution in Japan's automotive industry. To address these challenges, the taskforce created "sample data" to serve as a reference for each company's MBD operations and conducted data conversion verification. The knowledge gained from this activity was compiled and presented to CAD vendors as CAD function requirements.

This article reports on the details of these specific initiatives and considers the future of MBD.

08 From Linked Data to Live Collaboration: Advancing Engineering Collaboration with CDT, LCE, and Catena-X

Dr. Max Ungerer

This presentation introduces recent and upcoming prospective initiatives in the field of collaboration in engineering. It reflects on the achievements of the recently concluded Collaborative Digital Twins (CDT) project, which addressed the challenges of asynchronous, decoupled document exchange. CDT successfully developed a novel approach for synchronous, linked data exchange, laying a strong foundation for more transparent and consistent engineering collaboration. These results align closely with the principles of Catena-X, which emphasizes interoperable data exchange and standardized collaboration across industry partners.

Building on this foundation, prospective is now preparing to launch the next strategic project: Live Collaboration in Engineering (LCE), beginning in early 2026. The LCE initiative will focus on enabling real-time, cross-organizational collaboration across engineering processes and supply networks. Its objectives include fostering seamless data interactions across tools and partners, enhancing transparency and decision-making, and leveraging digital twin technologies within a collaborative, shared environment.

By linking the advances from CDT with the vision of Catena-X, the LCE project aims to extend interoperability into live, interactive collaboration scenarios, supporting industry-wide ecosystems. This transition represents a bold step in creating connected engineering environments that transform how organizations collaborate, innovate, and deliver value across the supply chain.

09 Advancements in Digital Twins and Data Utilization in plantOS

Mr. Kazuya Furuichi

At Chiyoda Corporation, we offer 3D digital twins and process digital twins that simulate the status of plants in a digital environment as part of our plantOS services for the Operation & Maintenance phase, supporting plant owners in ensuring safe and stable operations.

In the development of 3D digital twins and process digital twins, we collaborate with many partners to provide optimized solutions from both operational and maintenance perspectives.

Drawing from our experience in implementing various solution partners' functionalities, our extensive experience in different customer system environments, and our in-house development of digital solutions, we will introduce our efforts towards standardization and solution management.

10 Getting Engineering Data Right for Digital Thread

Dr. L.C. (Leo) van Ruijven

With respect to a large capital facility, Information Management (IM) and Configuration Management (CM) is important throughout its life cycle, but in practice both appears to have insufficient maturity. Many organizations within the industry struggle with implementing a sound and integral Information and Configuration Management process. The design in general is fragmented and created using tools from different vendors, even by discipline, and the combination of lack of interoperability and lack of tooling supporting IM and CM wastes money, reduces plant efficiency hindered reuse of design knowledge and potentially even cause safety issues.

In the Netherlands, the Pallas organization is preparing the replacement of the ageing High Flux Reactor (HFR), producing medical isotopes in the Netherlands. This paper presents a pragmatic and proven implementation of IM and CM in the Pallas nuclear facility that elegantly meets the needs of IM and CM with respect to the equilibrium triangle specified by the International Atomic Energy Agency (IAEA). This triangle in fact represents the Why, How and What of a nuclear facility and their mutual relations which ought to be always traceable. In practice these mutual relations are blocked by interoperability barriers that mostly have an organizational, technological, and semantic nature.

As one of the key points, Pallas has opted for linked data, semantic modelling, and graph database technology to realize a Common Data Environment (CDE, as per ISO 19650). In this CDE all data obtained from the fragmented software tool set used over the life cycle of the facility is classified, harmonized, signed, and integrated. Based on international standards like ISO 15926 a knowledge-centric Integrated Information Model (IIM) was developed and leveraged as a modern and efficient approach to better support, manage and enable seamless sharing, transfer, and use of sustainable design knowledge and information within and across all facility life cycle phases.

The CDE is organized by means of a set of related data structures (e.g., System-, Work- and Geographical Breakdown Structures) seamlessly merging the data obtained from the engineering environment. Essential in the CDE approach as applied in the Pallas project is the cleaning process of data obtained from the landscape of software tools which require thoroughly "washing" of the data exported by the various software tools. The cleaning process corrects syntax errors and harmonizes and classifies all data in accordance with the IIM and RDL and assures integrity, getting engineering data ready for both a Digital Thread and Digital Twin.

This presentation describes:

1. Can AI (Artificial Intelligence) be used for Project Management?
2. How to make best use of AI for Project Management?
3. What are the benefits and pitfalls when adopting AI?

Project management has a long history, dating back thousands of years. A major turning point came around World War II, when the Gantt chart, CPM, and PERT were developed. At the same time, more and more projects have become international, which requires more data standardization. However, project management has remained largely document centric.

Now, in 2025, we are entering a new era of project management—one that is more data-centric, science-centric, and IT-centric.

On the other hand, CII (the Construction Industry Institute) advocates AWP (Advanced Work Packaging) to better control projects—an enhanced approach to project management that controls work at a much more granular level by creating work packages under the WBS (Work Breakdown Structure). Each work package manages its process, inputs, and outputs—constraint management—leading to an explosion of information.

So how do we make use of this abundance of information? We should use it not only for the transactions required for project execution, but also for analysis and prediction.

Maintenance is a major cost factor for industry. In the resources sector maintenance represents 40-80% of operating costs. Data about the same assets is stored in many different systems, held by different organisations, and not interoperable. Semantics is key to being able to exchange data with confidence and perform reasoning. Also, there is increasing recognition of the role of controlled vocabulary and schemas in applying AI to improve productivity, business process efficiency, and for risk management.

This talk describes the technical and business opportunities that a shared, controlled, RDF based ontology ecosystem underpinned by ISO standards will enable. We will present an overview of the existing models and tools in the ISO 23726 Ontology Based ecosystem and talk about the different industrial groups (CFIFOS, DEXPI, Arrowhead fpVN) who are involved. We will show examples of how ontology models aligned to the Industrial Data Ontology are being used to 1) automate valve selection in the engineering design process, and 2) for semantic interpretation of engineering standards. The talk will conclude with examples of how ontology-based schema can assist large language models for routine SMART maintenance and safety engineering tasks.

The presentation focuses on the digital and intelligent transformation of tunnel boring machines (TBMs). By integrating big data, AI and digital twins, and replacing experience-driven practices with data-driven decision-making, it significantly reduces the variability from human factors. This accelerates the shift from mechanical to intelligent tunnel construction, ultimately improving quality, safety and productivity, helping set the global direction for underground engineering. This topic will systematically present the smart TBM technology platform across intelligent manufacturing, intelligent tunneling, intelligent operations & maintenance, analyze its alignment with ISO industrial data standards and look ahead to required standards in this field.

One of the distinct characteristics of a built facility is the involvement of highly fragmented organizations throughout its lifecycle, performing various engineering and management functions in a shared manner. Although numerous useful international standards exist for exchanging and integrating facility information, they can confuse practitioners and systems trying to understand their application in daily operations. A comprehensive, top-down guideline focused on industry-specific business requirements can help address this challenge within the digital ecosystem. This presentation discusses the issues and needs of standardized information sharing for smart industrial plants, including manufacturing and power generation facilities. An example from a recent ISO project for the Nuclear Digital Ecosystem (ISO/FDIS 18136-1 by ISO/TC184/SC4) illustrates how it can support facility-specific information exchange.



Mr. Kenneth Swope

The Chair of ISO/TC 184/SC 4,
Enterprise Interoperability Standards,
The Boeing Company

Kenneth (Kenny) Swope leads Boeing's PLM System of Technical Excellence team, promoting best practices and data standards across Boeing and its supply chain. With over 30 years of experience, he has contributed to manufacturing research, engineering, and PLM implementations. Kenny chairs ISO/TC 184/SC 4, overseeing over 800 international standards for product data and smart manufacturing. He is a recognized expert in Smart Manufacturing, Digital Twin, and Machine Readable Standards, and actively mentors youth in robotics through 4-H and FIRST programs.



Mr. Jean Brangé

Président, ISO TC 184/SC 4/TF2 Convenor
AFNeT Services
ISO 10303-242 Project Leader

Jean Brangé, Project Leader for ISO 10303-242 (STEP AP242) at ISO representing AFNeT, brings over 20 years of experience as an architect specializing in housing and complex buildings, integrating digital design, simulation, and technical rigor. He now leads international standard development for 3D and product data interoperability, guiding major STEP initiatives including AP242 Editions 1–4, benchmarks, and pilot projects. His work focuses on model-based standards, digital twin, long-term archiving, and PLM integration. Jean actively contributes to AFNeT, PDES Inc., prostep ivip, and global standardization communities, and speaks regularly on MBSE, STEP architecture, and digital continuity. He promotes open, sustainable standards that support collaboration across extended enterprises.



Dr. Timothy King

CEng CITP FIMechE FBCS DIC ACGI CTIO IM&T Fellow
Head of Digital Architecture & Design – FCAS Air Sector (UK) Enterprise Architecture Discipline Lead
BAE Systems Air Digital, Data & Infrastructure

Dr. Timothy King is Head of Digital Architecture and Design for one of the major air programmes at BAE Systems. He has been involved in ISO/TC 184/SC 4 since 1995, developing a deep understanding of information sharing and data quality. He is chair of the British Standards Institute committee for Industrial data and manufacturing interfaces. He has applied his understanding to digital transformation projects in large organizations that are involved in international collaboration and/or the management of high-value engineered products. These organizations have included Babcock, NATO, Network Rail, Rolls-Royce, Shell, the UK National Nuclear Laboratory and UK MOD.



Dr. Shinichi Urakawa

Skyage Inc. / Skyage-Next Inc. President System Innovation Center Director
Rikkyo Univ. Graduate School of AI and Science Visiting professor Mamezo Ltd. Director
Ouranos Ecosystem Promotion Center Director

President and CEO, SkyAge Inc.; Visiting Professor, Graduate School of Artificial Intelligence Science, Rikkyo University; Representative Director, Uranos Ecosystem Promotion Center; Former Senior Managing Executive Officer, Sompo Japan Insurance Inc.

Joined IBM Japan, Ltd. in 1984; served as Head of IT at Sompo Japan Insurance Inc. from 2013; assumed current position.



Mr. Hiroshi Nagakura

Group Leader, Commercial Aviation Systems,
Development Process Innovation Group, Mitsubishi Heavy Industries, Ltd.
Technology & Digital Innovation Department,

Joined MHI in 2008 and involved in the MRJ (Mitsubishi Regional Jet) development project for about 12 years, responsible for aircraft configuration and aircraft level integration. Currently, as part of preparations for the development of the future commercial aircraft, he is promoting the establishment and trial of innovative development process by using digital engineering and MBSE (Model-Based Systems Engineering) methodology.



Dr. Martin Hardwick

President and CEO, STEP Tools, Inc.

Dr. Martin Hardwick is the SC4 team leader for digital manufacturing. He is the President and CEO of STEP Tools, Inc. a company that specializes in developing software for digital manufacturing. For thirty years, he was a Professor of Computer Science at Rensselaer Polytechnic Institute where he was department head from 2008 to 2012. He has authored more than 60 referred papers, taught thousands of students, won multiple NSF grants, and has been a principal investigator for multimillion-dollar DARPA and NIST programs. Libraries developed by STEP Tools are used in millions of CAD stations for STEP translation.



Mr. Fumiki Ohtani

JAMA taskforce on Data interoperability in digital engineering
leader

Toyota Motor Corporation, Design Quality Innovation Dept.. Joined 1991, after working on vehicle development (body design, vehicle CAE analysis), I was involved in corporate system development and design management, for example specification planning for the in-house PDM system etc..

I participated JAMA activities in 2020 and am currently the leader of the taskforce on data interoperability in digital engineering of JAMA (Japan Automobile Manufacturers Association).



Dr. Max Ungerer

Independent Engineering Consultant
prostep ivip Association

Dr. Max Ungerer holds a doctorate in computer science from the Technical University of Darmstadt. He worked over 27 years at PROSTEP AG in the Business Unit Strategy and Processes before retiring and continuing as an independent consultant. With 30 years of active involvement in international

standardization, Max chairs the German mirror committee of ISO TC184/SC4 and leads prostep ivip and VDA efforts in standardizing STEP, with a focus on AP 242. His deep expertise supports industry adoption of collaborative engineering standards and drives innovation in digital product data management and cross-organizational engineering processes.



Mr. Kazuya Furuichi

CHIYODA Corporation

Section Leader of plantOS Planning and Development in the O&M-X Solutions Division and General Manager of the CDO Office at Chiyoda Corporation. With experience as a process engineer in LNG, oil, and syngas design, and plant commissioning, he has led AI and digital solution development for plant operations since 2016. His work integrates plant data into simulations to enhance O&M efficiency and safety. He has contributed to AI reliability guidelines for plant safety and served on the editorial board of PETROTEC. He frequently presents and writes on AI and digital applications in plant engineering.



Dr. L.C. (Leo) van Ruijven

Principal Systems Engineer,
Croonwolder&dros B.V.

With 35 years of experience in Information Management across the full lifecycle of large capital facility projects in infrastructure, industry, and shipbuilding, he has chaired the Dutch NEN committee on information integration for 20 years and contributed to ISO TC 184/SC4. He initiated and edited ISO 15926-11, and is a member of the expert group for ISO/DIS 18136-1 on nuclear digital ecosystems. He has published peer-reviewed papers on MBSE ontology and earned a PhD in 2018 focused on improving interoperability in systems engineering. He also led the development of the Pallas Common Data Environment and its ontology.



Mr. Mikitaka Hayashi

VP of Enterprise Architect, MODS Management
Board of Advisor in Construction Industry Institute
Senior Executive Officer (Enterprise Architect), Thai Nippon Steel Engineering & Construction

Currently engaged with JGC, MODS Management, and Thai Nippon Steel, he specializes in Project Management (PMP) and Data Management (CDMP), with extensive international experience. He serves as CFIHOS Document Editor for Scope and Procedure, APAC Coordinator for DAMA International, and Chief Translator of the DMBOK2 – Data Management Body of Knowledge. He is a frequent speaker at international conferences on data and digital transformation, and has held roles such as Information Manager in the oil & gas industry at JGC, Enterprise Architect at MODS Management, and Digital Transformation Consultant at Thai Nippon Steel. He holds a Bachelor's degree in Building Architecture from Tokyo University of Science.



Dr. Melinda Hodkiewicz

Professor, Faculty of Engineering,
University of Western Australia,

Melinda is a full Professor of Engineering working to improve maintenance and safety practices. Her current focus is on semantic interoperability and the application of AI to maintenance. She was deeply involved in development of the ISO 55001 asset management standards for which she was awarded the MESA Medal in Australia. She held a \$2M fellowship funded by the mining company BHP (2015-2022) and co led the government-industry funded \$10M Centre for Transforming Maintenance through Data Science. She is part of the core team developing the ISO 23726 Ontology-based interoperability standards. In 2019 she was made a Fellow of the Australian Academy of Engineering (ATSE).



Dr. Dan Liu

Corporate Senior Consultant,
China Railway Construction Heavy Industry Corporation Limited

Dr. Dan Liu holds a Ph.D. in Mechanical Manufacturing & Automation from Tsinghua University (PRC), VP of China Railway Construction Heavy Industry Group and deputy director of enterprise technical center, currently corporate leader of international standardisation and senior consultant of company top management. She has 12 years' overseas R&D and working experience in Europe as EU FP5&FP6 project investigator and global sourcing leader, specialized mainly in Advanced Production System, Digital Factory and Global Supply Chain, dedicated to technical research and management as well as business operations in world-wide equipment manufacturing industry (SIDEL, GE Oil&Gas, ZOOMLION and CRCHI) for more than 20 years.



Dr. Youngsoo Jung

Dean and Professor,
College of Architecture,
Myongji University

Dr. Youngsoo Jung is the dean and professor of the College of Architecture at Myongji University in South Korea. He holds a Ph.D. from the University of Texas at Austin. Dr. Jung served as the eleventh president of the Korea Institute of Construction Engineering and Management (KICEM) and as the Inaugural co-president of the International Consortium of Construction Engineering and Project Management (ICCEPM).

Prior to joining the faculty in 2000, He had eleven years of industry experience as a project engineer, cost engineer, and information systems manager. He has over 300 publications, including journal articles, proceedings, books, and reports. His recent efforts focus on automated life-cycle information management for power plants, factories, and capital airports.



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