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von KARMAN INSTITUTE
FOR FLUID DYNAMICS

von Karman Institute for Fluid Dynamics

70th Anniversary 1956-2026

Agenda

18-19 September 2026



Our Sponsors

Thank you to the Belgian Ministry of Defense, the Belgian Science Policy Office (BELSPO), the founding nations: Belgium and the United States of America, and the contributing NATO countries namely: Bulgaria, Czech Republic, France, Germany, Greece, Hungary, Iceland, Italy, Luxemburg, Norway, Portugal, Romania, Türkiye and the Netherlands.

We thank our sponsors for their valuable support:
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Word
From the Managing Director



Peter Grognard

70 Years of Connecting Talent, Knowledge and Innovation

As we celebrate the 70th Anniversary of the von Karman Institute for Fluid Dynamics, we take a moment not only to reflect on our remarkable history, but also to look ahead with confidence and ambition. Since its founding in 1956, VKI has distinguished itself as a unique international institute where science, education, and innovation come together to address some of the most complex challenges in fluid dynamics and related technologies.

This milestone is first and foremost a celebration of people. It is a tribute to the generations of researchers, students, professors, staff members, alumni, industrial partners, governmental agencies, and academic institutions who have contributed to VKI's success over the past seven decades.

The history of VKI demonstrates a fundamental truth: breakthrough research does not happen in isolation. The most significant advances emerge when talented individuals and organisations come together, share knowledge, challenge ideas, and pursue common goals.

As we face the challenges of the future, from sustainable aviation, space exploration and defense to advanced energy systems and environmental technologies, the need for collaboration has never been greater. By combining expertise, fostering interdisciplinary research, and investing in the next generation of scientists and engineers, we will continue to push the boundaries of knowledge and innovation.

On behalf of VKI, I extend my sincere gratitude to all those who have contributed to our success over the past 70 years. Together, we have built an extraordinary institution.

SAFRAN

Some recount

the history of aviation

With us,

write its future



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HERE, WE CRAFT EXCELLENCE TOGETHER

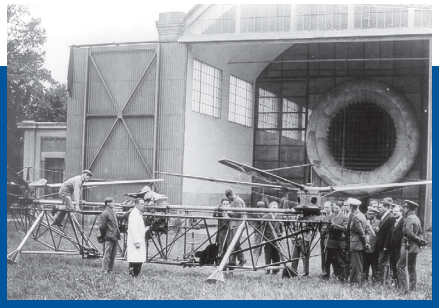
History at a glance

Where Aviation Pioneers Shaped the Future

Innovative aeronautical research was already underway between the two world wars, most notably through the development and test flights of the world's first helicopters by engineer Nicolas Florine between 1929 and 1933.

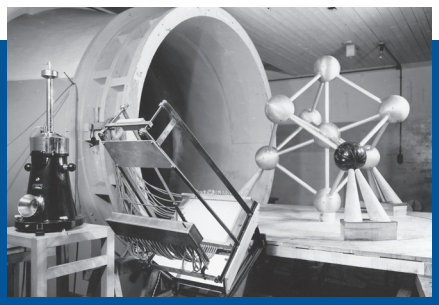
The first activities of the von Karman Institute (VKI) in its present form, as envisioned by Theodore von Kármán, began in 1956 under the auspices of the Belgian-American Educational Foundation for Experimental Aerodynamics (TCEA). Theodore von Kármán, a Hungarian-born scientist, emigrated to the United States in the 1930s, along with many other leading European researchers of his generation, and made a vital contribution to the Allied war effort. Widely regarded as the most influential aerodynamicist of the 20th century, he was awarded the National Medal of Science in 1963 by President John F. Kennedy, the highest scientific honour in the United States. Following his death later that same year, the TCEA was renamed the von Karman Institute, adopting the name it proudly bears today.

Today, the von Karman Institute (VKI) conducts cutting-edge research in key areas such as space, sustainable aviation, energy transition, nuclear safety, renewable energy, artificial intelligence, and critical infrastructure resilience. Leveraging world-class experimental facilities, advanced simulation tools, and internationally renowned expertise, VKI develops innovative technologies for future aircraft, spacecraft, energy systems, and industrial infrastructure. The Institute also plays a crucial role in educating and training the next generation of engineers and scientists to address the technological challenges of the 21st century.





First helicopter developed by Nicolas Florine and Theodore von Kármán receiving the National Medal of Science by President John F. Kennedy



Mockup of Atomium tested in the Low Speed Wind Tunnel

Anniversary Day 1

Friday, 18 September 2026

10:00 - 10.30	Registration for the Visit of the Laboratories
10.30 - 12:15	Visit of the Laboratories
12:30 - 13:30	Sandwich Lunch
13:15 - 13:45	Registration for Afternoon Arrivals

14:00 - 16:40 **Plenary Session featuring long-term VKI partners from industry, politics, universities, research centres, and governmental agencies**

Welcome
Prof. Cind du Bois, Full Professor at Royal Military Academy and Moderator of the Plenary Session

Opening Words
Dr. Bryan Wells, Chair of the Board of Directors, von Karman Institute for Fluid Dynamics

Welcome address and VKI in the future
Mr. Peter Grognard, Managing Director, von Karman Institute for Fluid Dynamics

Message from
His Excellency Ambassador Willem Baron Van de Voorde, Permanent Representative of Belgium to NATO

Seventy Years, One Mission: Research, Defence, and a Strong VKI–KMS Alliance
Major General Aviation An-Roos De Potter, Director of Royal Military Academy

Cultivating Talent Together: VKI-ULB Joint Academic and Research Collaboration
Dr. Marius Gilbert, Vice-Rector for Research, Université libre de Bruxelles

Longstanding Partnership: VKI and SCK CEN from MYRRHA to Small Modular Reactors
Dr. Christophe Bruggeman, Deputy Director-General of SCK CEN

von KARMAN INSTITUTE
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YEARS OF VKI 1956 - 2026

Seventy Years of VKI: Enabling Europe's Exploration of Space
Dr. Tommaso Ghidini, Head of the Mechanical Department, European Space Agency

Congratulatory Video Message
Dr. Josef Aschbacher, Director General, ESA

VKI and NASA: A Longstanding Partnership Advancing Fundamental Research
Dr. Rupak Biswas, Director, Exploration Technology Directorate, NASA Ames Research Center

Innovation in Motion: How VKI and Avio Aero Are Shaping the Future
Mr. Luca Bedon, Advanced Technology & Defense Engineering Leader, Avio Aero

An Alliance for Knowledge: VKI and VUB's Academic and Scientific Collaboration
Dr. Jan Danckaert, Rector, Vrije Universiteit Brussel

VKI, Privileged Partner of Safran since Decades
Mr. François Lepot, Chief Executive Officer, Safran Aero Boosters

Message from
Ms. Vanessa Matz, Minister for Public Action and Modernization, in charge of Science Policy, Belgium

Message from
Mr. Theo Francken, Minister of Defense, Belgium

Signature of a Collaboration Agreement with SONACA
Mr. Yves Delatte, CEO, SONACA and Mr. Peter Grognard, Managing Director, von Karman Institute for Fluid Dynamics

Closing Word
Mr. Peter Grognard, Managing Director, von Karman Institute for Fluid Dynamics

16:40 | **Reception**

Our Speakers

Dr. Josef Aschbacher has been Director General of the European Space Agency (ESA) since March 2021, leading Europe's civil space programme across Earth observation, navigation, telecommunications, science, exploration and human spaceflight.



Josef Aschbacher
Director General
European Space Agency

Mr. Luca Bedon, as Avio Aero's research and technology leader, coordinates the company's advanced technology development activities in Europe and serves on the governing board of Clean Aviation and ASD Environment Commission and Civil Aviation Research Committee.



Luca Bedon
Advanced Technology &
Defense Engineering Leader
Avio Aero

Dr. Rupak Biswas has served as Director of Exploration Technology at NASA Ames Research Center since January 2016, overseeing advanced supercomputing, human systems integration, intelligent systems, and entry systems technology.



Rupak Biswas
Director
Exploration Technology Dir.
NASA Ames Research Center

Dr. Christophe Bruggeman has served as Deputy Director-General of SCK CEN, the Belgian Nuclear Research Centre, since 2022. In this role, he supports the Director-General in the overall management of the organisation, with a particular focus on the day-to-day scientific and technical policy and operations of the Research Centre. He is also the project director for RECUMO.



Christophe Bruggeman
Deputy Director-General
SCK CEN

Professor of Physics Jan Danckaert was elected Rector of Vrije Universiteit Brussel (VUB) in 2022. As Rector, he is committed to strengthening scientific progress and academic freedom, societal impact, and sustainability. He is dedicated to further consolidating VUB's position as a pioneering urban university, firmly rooted in Brussels and with a strong European and international outlook.



Jan Danckaert
Rector
Vrije Universiteit Brussel

Major General An-Roos De Potter is Commandant and Rector of the Royal Military Academy, bringing extensive expertise in military aviation, engineering, logistics, and strategic leadership.



An-Roos De Potter
Director
Royal Military Academy

Since 2023, Dr. Tommaso Ghidini has been leading the Mechanical Department of the European Space Agency (ESA). He is an Adjunct Professor at the Politecnico di Milano, a Lieutenant Colonel in the Italian Air Force Reserve, and a science communicator who advocates for space exploration and advanced technologies like 3D printing through global platforms like TED.



Tommaso Ghidini
Head of the Mechanical Dep.
European Space Agency

Dr. Marius Gilbert is Vice-Rector for Research and Knowledge Transfer, and Vice-Rector for Culture and Science Outreach at the Université libre de Bruxelles (ULB). Since 2022, he has authored the column Après l'orage ("After the Storm") in the newspaper Le Soir, where he explores the relationship between science and society.



Marius Gilbert
Vice-Rector for Research
Université libre de Bruxelles

Peter Grognard has served as Managing Director of the von Karman Institute for Fluid Dynamics (VKI) since April 2018. He serves on the boards of several scientific and industrial organisations, including the Fondation Universitaire Stichting and ARSEC.



Peter Grognard
Managing Director
von Karman Institute
for Fluid Dynamics



François Lepot

Chief Executive Officer
Safran Aero Boosters

François Lepot has been Chief Executive Officer of Safran Aero Boosters (SAB), the Belgian subsidiary of the Safran Group, since 2019. Under his leadership, Safran Aero Boosters continues to strengthen its position as a technology partner to aerospace engine manufacturers while driving innovation in sustainable aviation technologies.



Bryan Wells

Chair of the Board of Directors
von Karman Institute
for Fluid Dynamics

Dr. Bryan Wells has served as Chair of the VKI Board of Directors since May 2025. From 2019 to June 2025, he was NATO's Chief Scientist and chaired the NATO Science and Technology Board (STB). Prior to this appointment, Dr. Wells held the position of Head of Science and Technology Policy, Strategic Research and International Engagement at the UK Ministry of Defence.



Yves Delatte

CEO
SONACA

Yves Delatte holds a degree in civil engineering. After gaining experience at Glaverbel and McKinsey, he joined Sonaca, one of Wallonia's leading aerospace companies. In 2021, he succeeded Bernard Delvaux as CEO. Today, the group ranks as the world's third-largest independent manufacturer of aerostructures and is strengthening its capabilities to achieve its ambition of helping to decarbonize the aircraft of the future.

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70 YEARS OF

At the Leading Edge of Fluid Dynamics

VKI

1956 – 2026

18-19 SEPTEMBER 2026
VON KARMAN INSTITUTE
FOR FLUID DYNAMICS

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HyFAR - ARA

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MEMBERS

ArianeGroup, CEA, CNES, CNRS, Inria, ONERA, R.Tech, the University of Bordeaux, and the University of Limoges.

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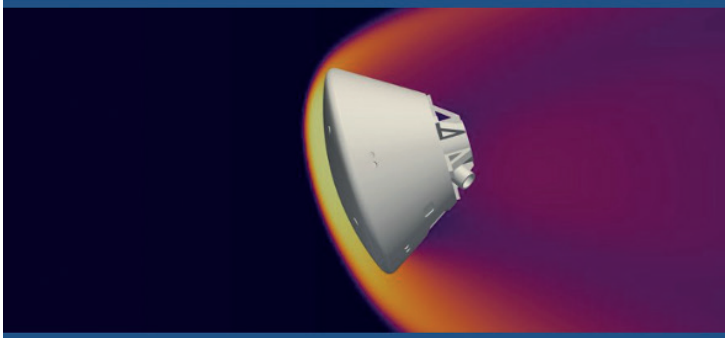
The French Alternative Energies and Atomic Energy Commission (CEA) is a leading institution in research, development, and innovation, operating in four major domains: defense and security, low-carbon energy (nuclear and renewable sources), technological research for industry, and fundamental research in the physical and life sciences.



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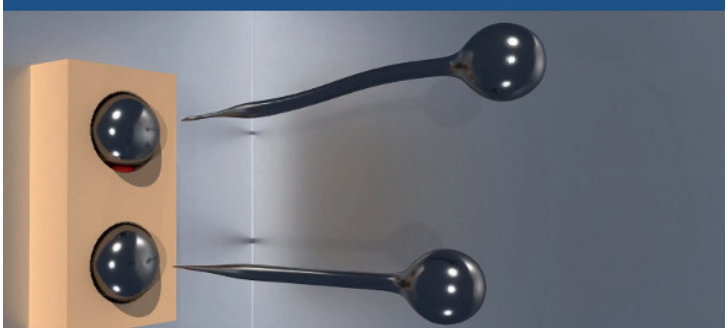
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We turn applied research into industrial innovation

FLOW Matters is a company originated from TU Eindhoven offering physics-based consulting and simulation software — from multiphase to rarefied gas flows.

We build tailored numerical models for partners in high-tech industries, working with their engineering teams from feasibility to full-scale implementation.



von KARMAN INSTITUTE FOR FLUID DYNAMICS

At the Leading Edge of Fluid Dynamics

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Anniversary Day 2

Saturday, 19 September 2026

08:45 - 09:15	Registration and Welcome for the Morning's Visit of the Laboratories
09:30 - 10:45	**Visit of the Laboratories**
09:15 - 11:00	*VKI Alumni Association Board of Directors for members of the Board only*
10:00 - 10:45	Registration and Welcome

11:00 - 12:00 **Academic Session: Past Foundations and Future Directions**

Welcome Address
Mr. Peter Grognard, Managing Director, von Karman Institute for Fluid Dynamics

Word from the VKI Alumni Association
Dr. Cis De Maesschalck, President of the VKI Alumni Association and Capability Lead - Fluid Mechanics, Rolls-Royce

Shaping the Next 70 Years: VKI's Strategy for the Future
Mr. Peter Grognard, Managing Director, von Karman Institute for Fluid Dynamics
Mr. Sven Van Loo, Executive Director for Institutional and Infrastructure Development, von Karman Institute for Fluid Dynamics

Educating the Next Generation: The Strategic Evolution of VKI's Academic Programmes
Prof. Jeroen van Beeck, Dean of the Faculty, von Karman Institute for Fluid Dynamics

Inspiring the Next Generation: Women Driving Innovation in Fluid Dynamics
Prof. Delphine Laboureur, Associate Professor and Chair of BeWise, von Karman Institute for Fluid Dynamics

Fluid Dynamics in the Age of AI: How Can VKI Lead?
Prof. Miguel Mendez, Professor, von Karman Institute for Fluid Dynamics

12:00 - 13:00	Sandwich Lunch

von KARMAN INSTITUTE FOR FLUID DYNAMICS

70 YEARS OF VKI 1956 - 2026

13:00 - 14:00	**Alumni Session: The VKI Community**

Prof. Dr. Filippo Coletti
Full Professor, Department of Mechanical and Process Engineering, ETH Zürich

Dr. George Symeonidis
Scientific Officer, European Commission

Prof. Clara García-Sánchez
Associate Professor, Department of Architecture and Built Environment, TU Delft

Dr. Jérôme Anthoine
Director of DMPE, Multi-Physics for Energetics Department, ONERA

Dr. Stefan Zemsch
Project Leader, HVAC-Sytstem Engineering and Simulation, BMW Group

14:00 - 15:00	**Roundtable: The Future of VKI**
15:00 – 15:30	Coffee Break
15:30 - 15:50	**Conclusion of the Roundtable**
16:00 – 16:30	**VKI Alumni Association General Assembly** Chair: Dr. Cis De Maesschalck, President of the VKI Alumni Association and Capability Lead - Fluid Mechanics at Rolls-Royce
16:45 – 18:15	**Visit of the Laboratories**

18:30	Bus Departure from VKI to Hotel Van Der Valk Nivelles Sud
19:00 – 22:00	**Alumni Dinner Hotel Van Der Valk Nivelles Sud**
22:30	Bus Departure from Hotel Van Der Valk Nivelles Sud - VKI - Centre of Brussels

Our Speakers

After completing the VKI Diploma Course in 1996 and writing a thesis in aeroacoustics in the Environmental and Applied Fluid Dynamics Department, Jérôme Anthoine joined the VKI Faculty as an Assistant Professor in 2000. He left VKI to join the ONERA Propulsion Laboratory in 2009 and is currently the Director of the Multi-Physics for Energy Department at ONERA, The French Aerospace Lab.



Jérôme Anthoine
Director of DMPE
ONERA

Filippo Coletti is Professor of Experimental Fluid Dynamics at ETH Zurich, where he has been since 2020. He previously served as McKnight Land-Grant Professor of Aerospace Engineering and Mechanics at the University of Minnesota after joining its faculty in 2014. He completed his doctoral studies at the VKI and the University of Stuttgart, earning his PhD in 2010.



Filippo Coletti
Full Professor
ETH Zürich

Cis De Maesschalck is a Capability Lead - Fluid Mechanics at Rolls-Royce in the UK, and currently oversees the engines hot-end aerothermal engineering across various aerospace programmes in Bristol. As a VKI Research Master & PhD alumnus (2012 & 2016), he now serves as the President of the VKI Alumni Association.



Cis De Maesschalck
Director
Capability Lead - Fluid Mechanics
Rolls-Royce

Clara García-Sánchez is Associate Professor and Head of the Urban Data Science section at TU Delft. Her research focuses on applying uncertainty quantification methodologies for the prediction of winds in the urban canopy. She earned a PhD in Physics from the University of Antwerp and the von Karman Institute in 2017 and is a recognized expert in urban flow modelling.



Clara García-Sánchez
Associate Professor
TU Delft

Delphine Laboureur earned her PhD at VKI and ULB in 2012. She worked at Texas A&M on process safety, then rejoined VKI in 2015, becoming Assistant Professor (2018) and Associate Professor (2020). She leads VKI's Thermal Management and Process Safety group, is VKI's Gender and Diversity Officer, and was elected BeWise President in 2025.



Delphine Laboureur
Associated Professor
von Karman Institute
for Fluid Dynamics

George Symeonidis has an Aerospace Engineering background (BSc – PhD University of Bristol; Diploma & PhD research at VKI) and is Scientific Officer at the European Research Council working with the PE8 Products and Processes Engineering Panel (which encompasses areas like Aerospace and Computational Engineering, Fluid Mechanics,...)



George Symeonidis
Scientific Officer
European Commission

Jeroen van Beeck is Head of the Environmental and Applied Fluid Dynamics Department at the von Karman Institute. As one of the three VKI's Heads of Department, Jeroen also acts as Dean of VKI's faculty of fluid dynamics and is therefore responsible for the execution and strategy setting of all educational programmes at VKI.



Jeroen van Beeck
Dean and Head of Environmental and Applied Fluid Dynamics Department
von Karman Institute for Fluid Dynamics

Sven Van Loo is Executive Director for Institutional Affairs and Infrastructure Development at the von Karman Institute for Fluid Dynamics (VKI) and former Chair of its Board of Directors. He brings extensive experience in defence, security and public policy having advised Belgian ministers and Prime Minister Alexander De Croo on national security.



Sven Van Loo
Executive Director for Institutional Affairs and Infrastructure Development
von Karman Institute for Fluid Dynamics

Stefan Zemsch is a project leader at the BMW Group. He is a recognized expert in the design and validation of vehicle climate systems. During his decades of experience at BMW, he has led the development of vehicle thermal-management and air-conditioning systems, while driving innovation in function development, system simulation methodologies, and virtual concept design. He holds a PhD from VKI and RWTH Aachen University, awarded in 1996.



Stefan Zemsch
Project Leader, HVAC-Sytstem Engineering and Simulation
BMW Group

Next Events



- Introduction to Measurement Techniques
  05 - 09 October 2026
- Introduction to Atmospheric Flows: Theory, Experiments, and Hands-on Simulation
  18 - 20 November 2026
- Turbomachinery Aeroelasticity
  01 - 04 December 2026
- Introduction to Ground Testing Facilities
  18 - 20 January 2027
- Introduction to Computational Fluid Dynamics
  25 - 29 January 2027
- Hypersonic Aerothermodynamics
  01 - 04 February 2027
- Radial Compressor Design and Optimization
  22 - 26 February 2026
- 18th VKI PhD Symposium
  02 - 05 March 2027
- Hands-on Machine Learning in Fluid Dynamics
  08 - 12 March 2027

Next Events

- Introductory Course to OpenFOAM®
  23 - 24 March 2027
- OpenFOAM® General Programming
  25 March 2027
- Theory, Experiments, Applications and Modelling of Turbulent Combustion
  10 - 14 May 2027
- Icing Physics and Ice Accretion Simulation
  24 - 26 May 2027
- CFD for Atmospheric Flows and Wind Engineering
  31 May - 04 June 2027
- Graduation Ceremony Academic Year 2026-2027
  02 July 2027

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