

CONCORDIA INSTITUTE  
OF AEROSPACE DESIGN  
AND INNOVATION




15<sup>th</sup>

CIADI

ANNIVERSARY





Thanks to all students, faculty members and CIADI staff who have contributed to the success and reputation of CIADI. The work done is impressive and the possibilities in front of us are amazing. I am very glad and honoured to have the privilege to lead this Institute and work with so many dedicated people.

**CHRISTIAN MOREAU**

*Professor, Department of Mechanical and Industrial Engineering  
Director of CIADI*







**ALAN SHEPARD**  
*President and  
Vice-Chancellor*



**GRAHAM CARR**  
*Provost and Vice-President,  
Academic Affairs*



**AMIR ASIF**  
*Dean, Engineering and  
Computer Science*

# CIADI

## CELEBRATING 15 YEARS OF SUCCESS

With over 200 companies and more than forty thousand aerospace jobs located in the region, Montreal is home to one of the largest aerospace clusters in the world. Concordia University is a key player in this dynamic and pivotal sector, partnering with dozens of small and medium-sized enterprises, as well as the major industrial players in the aerospace field.

Our Faculty of Engineering and Computer Science trains engineers to become next generation leaders in aerospace and engages fully with pure and applied research demands in the field. At the same time, our John Molson School of Business provides diverse forms of training that position students to take up key management responsibilities in the industry.

This vision of preparing our students to make a smooth transition to professional life was instrumental to the development of the Concordia Institute for Aerospace Design and Innovation (CIADI) fifteen years ago.

Since its inception, CIADI has provided hands-on, multidisciplinary training and internship opportunities to hundreds of students. Those experiences augment the skills our students have to offer.

With a strong research orientation, novel new programs, strong and growing industry connections, aerospace is a key strategic area for Concordia. CIADI's success is a big part of this story and a success of which we are justly proud. On its fifteenth anniversary, congratulations CIADI, for all that's been achieved.



**CHRISTIAN MOREAU**

*Professor, Department of  
Mechanical and Industrial Engineering  
Director of CIADI*



**NADIA BHUIYAN**

*Professor, Department of  
Mechanical and Industrial Engineering  
Director of Education, CIADI*

# CIADI

## WHEN GREAT IDEAS TAKE FLIGHT

With the launch of CIADI 15 years ago, Concordia established a pioneering way to train students in aerospace engineering and support the Montreal aerospace industry. This initiative has been extremely successful in providing our highly motivated top students with internships in leading aerospace companies. Its success led to other Montreal universities creating similar programs that, in turn, led to the creation of the Montreal Aerospace Institutes (MAI), which coordinates the internship programs from the six participating universities in Montreal, Sherbrooke and Quebec City.

Last year, Concordia University took another innovative step forward. CIADI is now a university-wide research and education platform that continues providing internship opportunities for our students but also brings together faculty members from the Faculty of Engineering and Computer Science, the John Molson School of Business and the

Faculty of Arts and Sciences that are active in aerospace research. This unique platform promotes and supports large aerospace research projects and puts Concordia at the forefront of aerospace in Quebec.

Through CIADI, we offer excellent training, networking and community engagement activities, as well as collaborative research opportunities. We have strengthened our ties to industry, bringing in SME's that are so critical to the industry. We have established an important partnership with l'École nationale d'aérotechnique and are now offering hands-on training programs to our students. Our students are joining the ranks of management and executives in the Montreal aerospace industry and abroad. Since its inception, we've seen countless students graduate and pursue successful careers in aerospace. In this booklet, we highlight a few of our many success stories.

CIADI has grown in membership, vision, effectiveness and reputation. Everyone involved has shown uncompromising commitment towards the vision of making Concordia University a recognized leader in aerospace in Canada and beyond.

CIADI is a terrific example of what happens when great ideas take flight.











# AEROSPACE

## PROGRAMS AND EVENTS AT CONCORDIA

✈ **New Bachelor of Aerospace Engineering**

[www.concordia.ca/academics/undergraduate/aerospace-engineering.html](http://www.concordia.ca/academics/undergraduate/aerospace-engineering.html)

✈ **NSERC Chair in Aerospace Design Engineering (NCADE)**

[www.concordia.ca/cunews/main/stories/2015/11/18/new-nserc-chair-in-aerospace-design-engineering-at-concordia.html](http://www.concordia.ca/cunews/main/stories/2015/11/18/new-nserc-chair-in-aerospace-design-engineering-at-concordia.html)

✈ **New Partnership with École nationale d'aérotechnique**

One-week and one-day hands-on training workshops offered to CIADI students

[www.cegepmontpetit.ca/ecole-nationale-d-aerotechnique](http://www.cegepmontpetit.ca/ecole-nationale-d-aerotechnique)

✈ **Concordia University Aviation Think Tank**

[www.concordia.ca/encs/aerospace/cunews/main/stories/2016/09/27/concordia-new-aviation-think-tank-aerospace-research.html](http://www.concordia.ca/encs/aerospace/cunews/main/stories/2016/09/27/concordia-new-aviation-think-tank-aerospace-research.html)

✈ **CIADI Summer Science and Engineering Camp**

[www.concordia.ca/encs/aerospace/cunews/main/stories/2016/07/12/seeking-aspiring-scientists-aged-6-to-13-ciadi-summer-science-engineering-camp.html](http://www.concordia.ca/encs/aerospace/cunews/main/stories/2016/07/12/seeking-aspiring-scientists-aged-6-to-13-ciadi-summer-science-engineering-camp.html)

✈ **CIADI Alumni Speaker Series**

✈ **CIADI Speaker Series**

✈ **CIADI Aerospace Workshop with SMEs**

[www.concordia.ca/cunews/encs/aerospace/2016/07/26/aerospace-workshop-for-SMEs.html](http://www.concordia.ca/cunews/encs/aerospace/2016/07/26/aerospace-workshop-for-SMEs.html)

# ALUMNI

## TESTIMONIALS



**NILOOFAR MORADI**

*Turbine Aerodynamics,  
Pratt & Whitney Canada Corp.*

CIADI launched my career by providing real engineering experience with aerospace industry giants such as Pratt & Whitney Canada and Rolls Royce. Thanks to the CIADI Global program, I achieved the childhood dream of working at the NASA Glenn Research Center with an incredible team of engineers. The multiple internships put me on a fast track to understanding the professional working environment. I worked with industry role models who set powerfully inspirational examples as accountable, dynamic team players. My growth and exposure through CIADI equipped me with a strong competitive edge, and I locked down a full-time position well before graduating even in the trough of an economic downturn. I have CIADI to thank for propelling my career which has blossomed into an exhilarating ride including cutting edge novel designs for P&WC. In the footsteps of alumni before me, I choose to pay it forward by supporting CIADI and know that future CIADI-experienced coworkers will continue to strengthen the local and global aerospace industry.



**SIMON AZAR**

*Airbus, Regional Sales Director – Asia*

CIADI has been an incredible trampoline for my career. It allowed me to launch my professional life with world-leading aerospace companies before even graduating. Upon graduation, I already had a diversified CV having worked in various aerospace companies in Montreal and in Europe. This made me a very interesting candidate when competing with many other fresh graduates for my first job at Pratt & Whitney Canada.

When I applied to Airbus through the PROGRESS scheme, a two-year young manager development program, it was clear that they were looking for international profiles. CIADI Global put me in a great position to sell myself as having, even at an early stage in my career, unique international experience. Once again it allowed me to differentiate myself from the three thousand applicants trying for the seventy openings.

Above all, I think CIADI made me realize early on that aerospace and aviation are truly fascinating fields with endless opportunities, in Montreal, and around the world!



**ISMAIL MOKABEL**

*Senior Director Commercial Services,  
Pratt & Whitney Canada*

Ismail Mokabel joined Pratt & Whitney Canada (P&WC) as a CIADI student in 2004. His CIADI “capstone” project about introducing a quality scope to value stream mapping won the Certificate of Merit for Excellence in Engineering Design, from Concordia University’s Department of Mechanical and Industrial Engineering and got him recruited by P&WC. Upon his graduation in summer of 2015; Ismail joined P&WC and has held assignments of increasing responsibility in Quality, Logistics, Supply Management, Strategic Planning and Aftermarket. Only 10 years into his career in P&WC, Ismail was nominated to the executive ranks becoming the youngest member of the current P&WC’s executive team and one of the youngest to ever make the executive ranks in the company’s history. He is currently the Senior Director of Commercial Services. In his current capacity, Ismail is responsible for multi-billion dollar commercial P&Ls in the aftermarket and leads over 350 people in 5 continents. He oversees the new spare parts, surplus trading, new engine sales, engine leasing and warranty in P&WC. Ismail has a Bachelor degree in Industrial Engineering and a Masters in Applied Science Industrial Engineering from Concordia University. He also has executive leadership certificates from Darden School of Business and INEAD. He is currently part of the HELIOS Executive Institute leadership program and serves as an advisory to the Talents123 board helping spread the joy of learning to children in Montreal.





**TED HASSANEIN**

*Large Turbofan Operations Program  
Manager at Pratt & Whitney Canada*

CIADI provides aerospace enthusiastic students the opportunity to shape and define their career aspirations before completing their academic program. Personally, I strongly believe CIADI graduates start their career with three main advantages. First, they acquire experience from a technology leading industry, making their student profile attractive to hiring employers looking to strengthen their team. Second, they are exposed to hands-on expectations from the industry providing them confidence and motivation regarding their personal goal achievements. Third and most important, CIADI is a worldwide community of current and future leaders in the aerospace industry; through CIADI events, students are given the chance to expand their network. Today, after 15 years of CIADI success, our community has expanded from Montreal to major cities around the world like Seattle, Hong Kong, Hamburg, Toulouse, London and Dubai. For students driven by aerospace, the CIADI program will definitely launch their career on a solid path.



**NANCY PALIOTTI**

*Manager, Customer Account Management, Interior Design  
& Advanced Visualization, Bombardier Business Aircraft*

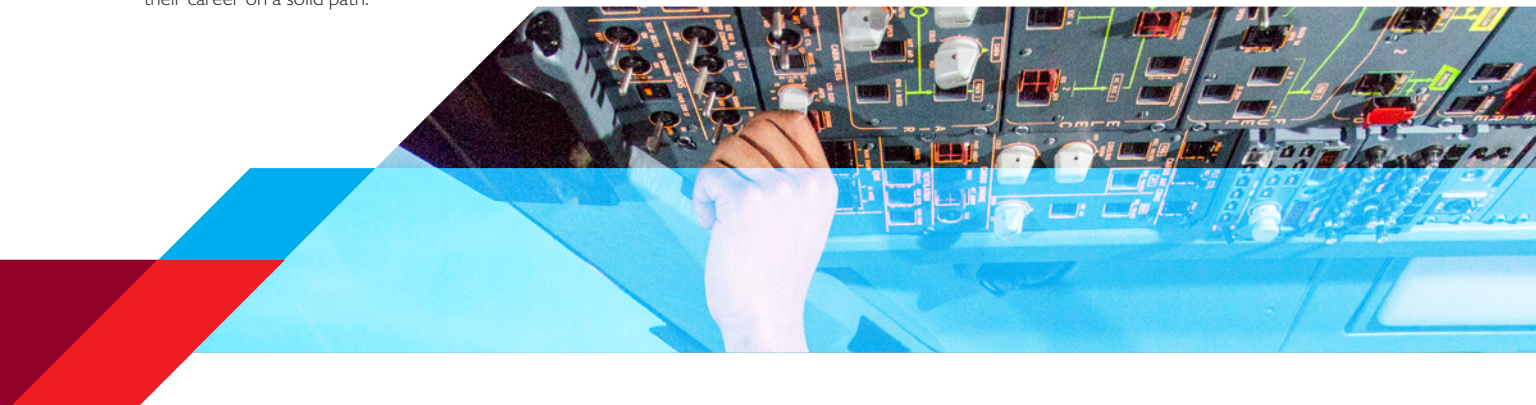
CIADI gave me the advantage of gaining early exposure to the aerospace industry as an undergraduate engineering student. I had the opportunity to work at Pratt & Whitney Canada on a challenging project that gave me “real industry” experience. I was also able to gain insight into other leading aerospace companies in Montreal and around the world by watching my fellow CIADI students provide progress updates on their various projects. I have no doubt that my experience at CIADI helped me secure a permanent position at Bombardier Aerospace in the Business Aircraft division. I consider myself very fortunate to have had the opportunity to be a part of CIADI during my undergraduate studies.



**STEPHEN TAKACS, Eng, M.A.Sc.,**

*Senior Spacecraft Engineer, Canadian  
Space Agency, Government of Canada*

As a student in engineering, building a solid foundation for my career was very important to me. I needed experience during my studies that would give me an edge in the workplace. CIADI provided me with that edge. Through CIADI, I was fortunate enough to work at CAE on a magneto-rheological device to cut production cost on simulators. This was a turning point in my career. Without CIADI I would not have been accepted to my graduate studies at the University of Toronto Institute for Aerospace Studies where I completed a Masters in Spacecraft Dynamics and Control. I would not have been hired at Bombardier Aerospace as a Sales Engineer and Competitive Intelligence Analyst. I would not have fulfilled my ultimate career dream of working at the Canadian Space Agency as a Senior Spacecraft Engineer in Satellite Operations. CIADI gave me the opportunity to fulfill my dream.



# INDUSTRY

## TESTIMONIALS



**MARIO MODAFFERI**

*Director Research & Technology, and Design Chief Engineer  
Pratt & Whitney Canada*

Students at the Concordia Institute for Aerospace Design and Innovation continue to represent some of the best emerging talent in aerospace. With their latest technology know-how, excellent skills set and high level of motivation and passion, they can be a terrific asset in helping to advance important company projects. As one of the founding members of CIADI, PWC has been very active in welcoming numerous CIADI students as interns every year. Many of these interns were later hired full time and have been very successful. They have been especially valuable in working on projects in four areas of our business that are critical to our future competitiveness: product cost reduction; advanced composite materials; "green" manufacturing and processes; and process innovation. Pratt & Whitney Canada is a firm believer in supporting initiatives such as CIADI. We are continuing to seek out new collaboration opportunities with universities to enhance our competitiveness and their curricula, to provide young engineering students with hands-on training experience, and to ensure the next generation is prepared to take on the challenges of tomorrow.



**BENOIT VILLIEN, MScE, MBA**

*Technology Manager,  
Siemens Canada Limited*

Over the years, CIADI students have played an increasing role in our engineering organization. They have demonstrated that their capabilities and proactive ways of thinking are of extreme value when it comes time to delivering business critical programs in an always more complex and demanding environment. With some of the first CIADI students now having reached managerial positions in our organization, no one can deny that this scheme has been a success for Siemens since 2005! I am really looking forward to another 15 years of successful and effective collaboration with Concordia.









Congratulations to CIADI for 15 years of success!

I'm proud to have been a part of this remarkable initiative for 14 years, watching it grow from a successful internship program to an umbrella organization that groups together all aerospace related education and research activities in the University. It has been a true pleasure and an honour to have been a part of this Institute.

**NADIA BHUIYAN**

*Professor, Department of Mechanical and Industrial Engineering  
Director of Education, CIADI*







**FACULTY OF ENGINEERING  
AND COMPUTER SCIENCE**

Concordia Institute of Aerospace  
Design and Innovation

