93rd Conference/Online Wuppertal
15th - 16th October 2020
# CICIND REPORT

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Editorial Board: Hermann Hoffmeister (Editor), Gary Eastman

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Dear friends,

According to the ancients, every birth is attended by the 3 fates. The first one (Clotho = spinner) spins the thread of the newborn’s life, the second one (Lachesis = allotter) allots the events which will shape the course of the newborn’s life, and the third (Atropos = inflexible) holds the scissors which will cut the thread of life (note that in the painting below, Atropos is the only one looking directly at you). This indicates that, despite our efforts, our voyage through life is often influenced and sometimes even determined by circumstances beyond our control. Our task is naturally to take advantage of the opportunities offered and surmount the obstacles we are faced with. It is probably what renders life miraculous.

It was indeed the stroke of the fate Lachesis which guided a series of events leading to my first CICIND meeting. The EPC contractor for a new power plant in Greece had envisioned building up references for specialized structures and asked me if I could design the chimney. It was 1993 and this project introduced me to Giovanni Di Poi (then at Mariani Battista, in charge of the slipform for the chimney), who in turn urged me to attend a CICIND meeting. Indeed, in September 1994 I walked into my first CICIND meeting in Copenhagen. The quality of the technical presentations is certainly a main attraction of our meetings, but I remember my exhilaration at being able to informally socialize with living legends of our profession. I will never forget my discussion with Roman Ciesielski during a bus tour in Copenhagen.

It is possible that our good fate Lachesis may have also been involved in the series of events leading to my asking for your vote of confidence to be elected CICIND President. During these last 4 years, the Governing Body, largely thanks to the work of our Secretary Hermann Hoffmeister, has tried to modernize CICIND and to steer it away from the shallow waters of a diminishing chimney market and into the wider world of specialized industrial structures. I am confident that this decision will prove to have been beneficial for CICIND. In order however for any endeavour to be successful, we need to ensure that our new President Albert De Kreij and the CICIND Governing Body receive the active support of our members. Please, contribute your ideas, talent, experience and time in our continuing effort to upgrade the work of our committees and the CICIND brand name.

Remember, Fate only offers an opportunity – it is our responsibility to act upon it.

I thank you all for your confidence and I am honoured to have served such a unique group of professionals and friends.

Michael Angelides

Ex-President of CICIND

The 3 Fates – Peter Thijs (1665) – Musée d’Art et d’Histoire, Geneva
Editorial

The COVID-19 pandemic is having a significant impact on the entire industry, not just to our industrial sector. We have all had to adjust our behavior to suit the restrictions placed on us and the transfer from physical to virtual has pushed us all out of our comfort zones. There will be fewer physical meetings, discussions, trade shows, marketing, etc. There will be fewer flights, fewer fuel guzzling kilometers on the road, less shopping in malls and fewer dinners in restaurants. There will be more digital solutions, more work at home, more internet shopping, and more internet communication by Zoom or Microsoft Teams.

The spread of the Pandemic has also had a significant effect on our CICIND conferences. It was completely new experience for me and all of our speakers. We tried very hard to hold our spring conference in Hanoi and an autumn conference on Cyprus. With the decision of the Vietnamese government to close the border, it became clear that we could not celebrate our CICIND meeting this year in Hanoi - neither in the spring nor in the autumn to replace Cyprus. It was a completely new experience for me and all of our speakers to master the first virtual CICIND conference from October 15 to 16 this year as a hybrid event. Our member, Prof. Goldack from the University of Wuppertal, was happy to host this conference. We were able to use one of the university’s lecture halls, which also offers sufficient space in accordance with the Covid-19 regulations. "Hybrid“ means that we had participants both on site and online. The microphone and video quality of the ZOOM meeting was excellent. Many thanks to all speakers and the guidance of the experienced team at the University of Wuppertal! You will find the lectures of this 93rd Virtual CICIND Conference in this report.

We have been informed that a new vaccine will be available very soon, possibly being administered before Christmas to the most needy. However, running such a large vaccination program around the world will take time. The restrictions will persist, and we expect the CICIND meetings to be held as virtual meetings possibly throughout 2021. We held an online Governing Body meeting in mid-November 2020 to discuss the next conferences taking account of the pandemic restrictions with the following outcome:

- We will hold a virtual meeting in spring 2021.
- In autumn 2021 we will try a personal meeting in Dresden, which will also be offered as a hybrid meeting.
- Hopefully in spring of 2022 we will have a "normal" CICIND conference in New Orleans. You can find the pre-notice of this meeting in this report.
- In autumn 2022, we are planning the Joint Conference with ICCT in Shanghai at the Tongji University – there is an advertisement for this event in this report. We will receive further details after consultations with Prof. Zhao and Prof. Ge to confirm the suitability of the revised dates.
- The 50th anniversary of CICIND will be celebrated from May 17th to 20th, 2023, in the beautiful city of Florence, Italy. Our member Prof. Claudio Borri is pleased to host this conference with the University of Florence.

I am particularly pleased with the excellent development of the work of the CICIND committees. This report provides the current status of the Life Time Management (LTM) work that Gary Eastman presented at the Virtual CICIND conference. We expect the new LTM guideline to be available in 2021.

The wind committee chaired by Hans-Jürgen Niemann have developed a new characteristic curve accounting for the effect of aeroelastic damping in Vortex Induced Vibrations. This will be implemented in a revised Wind Model Code.

The steel committee will be completely restructured. On behalf of CICIND, I would like to thank Steven Reid who has stepped down as Chairman of the Steel Committee. He had done a lot of work answering many questions from around the world. Since the American standards are a bit out of date, our CICIND Model Code for Steel is in great demand. Michael Angelides will now chair the Steel Committee and is about to assemble a new team to set up a revised Steel Model Code.

All the committees’ “activity reports” can be found in this report. With the declining business activity in Europe and America due to the current pandemic, we expect reduced sales in our business areas. We would like to start an initiative in the coming CICIND conferences to offer enough space to discuss the specific problems. You are invited to send me your suggestions and topics for such discussions.

We all hope that the new vaccines will work and allow us to have "face-to-face meetings" soon.

Hermann Hoffmeister
Dear CICIND Members,

It is a great honour and a privilege to have been elected President of CICIND during our October 2020 AGM. I would like to thank the CICIND membership for their trust and most especially, I would like to thank Michael Angelides for leading CICIND with great integrity and expertise in these past four years.

We have now conducted our first conference as a "virtual conference" and this is a good moment to ask ourselves how we should position CICIND for future years. The chimney industry has been in a steady decline for years now. There is no doubt that the virus will be fought back and international travel will once again be possible, but will we ever go back to the good old days of meetings with not only good papers but also great dinners and nice tours?

As I had mentioned during our October 2020 NGA, I have attended some 45 CICIND Meetings since 1997 and I know first hand how great it is to see beautiful cities with our group of CICIND friends, closing off our days with delicious dinners served in exceptional venues. Can we go back to that? I think we can, but only if our organization stays relevant in the current time.

So, how can CICIND stay relevant in 2020 and beyond?

The answer is both simple and difficult: technical innovation. CICIND deals with chimneys and cooling towers, and increasingly with silos, solar towers and other tall structures needed in the power and process industries. The challenge for CICIND, and all of its members, is to keep developing new solutions that help these industries to do their job more safely, more efficiently and with minimal environmental impact.

This is a challenge for each and every CICIND member. As a famous economist once said: "The imitators will always be beaten by the innovators" and this was never more true than today.

If CICIND members are successful in meeting this challenge, CICIND as an organization can be, and must be, a platform for the presentation of new ideas, where innovations can be presented, discussed, and refined.

If CICIND achieves this, it will also become a magnet for the power and process industries, drawing in new members who will either join for our meetings or follow proceedings remotely.

As my final point, I would like to stress that I am fully aware that CICIND and its members are already trying to innovate and have been doing so for a long time. As long as we keep working in this direction, I am confident that CICIND will be more and more successful in years to come, with in-person-meetings resuming as soon as possible and the organization growing stronger and stronger.

Albert de Kreij
At the General Assembly held at Wuppertal and online on 16th October 2020, Michael Angelides retired after more than 4 years as the President of CICIND. He was elected to the post at the conference in Mainz in 2016.

Michael’s contribution to our organisation has been enormous – having attended his first meeting in 1994, he has presented 27 lectures on a variety of subjects: Earthquake, Cooling Towers, Steel Construction, Ducts etc. He has chaired the Concrete committee and just taken over as the chairman of the Steel committee.

Although he is Greek by birth, he studied at the McGill University in Montreal where he met his wife Marika. During his graduate studies, he specialized in finite element analysis and his first professional experience was in in the field of orthopaedic biomechanics. He worked at McGill University and at the Montreal General Hospital carrying out research on the structural behaviour and the optimization of artificial implants for human joints. He then moved into the aerospace field and worked for Spar (today MDA) in Montreal carrying out structural analysis and design for telecommunication satellites.

In 1989, Michael and Marika moved back to Athens where Michael joined the Consultants, AMTE. Michael lived in Montreal for ten years, so his good knowledge of the city enabled CICIND to arrange a memorable 89th conference in the spring in 2018. Michael also arranged conferences in Santorini in 1996 and Athens in 2007 as well as a Governing Body meeting in Athens in 2016. During the GoBo meeting, he impressed us all with his wide knowledge of Greek history so he was able to act as our unofficial guide during the visit to Delphi.

Michael took on the honour of being our President in 2016 despite the fact that at the time Greece was going though very severe financial difficulties that had a significant impact on his business but along with his company, AMTE, he has survived the crisis.

Very few people outside Greece speak the language so I suppose that it is no surprise that he is fluent in other languages. His English is immaculate – it is almost as if it was the language of his birth and I understand his German is equally good. He has that unique ability to swap from one language to another in mid conversation.

Michael has two children, Melina who is a solicitor and Socrates who is just completing his Doctorate at Cambridge University. Melina is engaged to be married next year.

Looking to the future, we look forward to Michael’s continued engagement in CICIND with his deep knowledge and expertise of our business to assist us all in the coming years.

Gary Eastman
Portraits of the new Councillors

Guillermo Alvarez

Guillermo Alvarez is the Director of Tall Structures of the Global Dominion Access Group. Very well-known brands in the Chimney Industry belong to this group including Karrena, Beroa, ICC, Commonwealth, CRI, Bierrum, Altac, Bygging India and Steelcon.

Guillermo was born in Bilbao in 1970 but grew up in Madrid, where his parents moved in 1974. He went to College in Pamplona to University of Navarre where he graduated in Business Administration in 1993.

He started his professional career in Brazil in 1994 and joined the Karrena group (a company his father and some other investors bought in 1997) in 1999 as General Manager of Karrena Venezuela in Puerto Ordaz. He still works in the same group, renamed Beroa first and now Global Dominion Access, spending time in Brazil, Germany and since 2004 in Buffalo, NY.

Guillermo and Patti are together since 2006 and live in Buffalo NY with Patti’s three kids from her first marriage: Hannah, Gabby and Jack.

Guillermo has been a CICIND Member for years and hopes to continue contributing to the organization as a member of the Government Body.

His goals as Member of the Government Body will be to enhance CICIND as the main meeting point for Networking in our Industry. Twice a year, you can meet your key stakeholders in our Industry: Customers, Competitors and Vendors.

Rob Ernst

Rob Ernst was born in the city of Gouda, The Netherlands, on the 18th of May 1966. He started his career as mechanical engineer and developed his skills in the field of management and business administration with the growth of his company Array Industries B.V.

Array Industries was founded in 1990, originally providing engineering services only. In 1995 Array Industries started designing CHP installations for reciprocating engines. From that moment Dutch subsidiaries of Jenbacher, MWM and Caterpillar along with Dutch utility companies found their way to Array Industries. By acquiring several related companies, including manufacturing facilities, Rob shaped today’s Array Industries with a well skilled engineering team and a state of the art workshop.

In 2018 the company changed focus towards Industrial Emission Control. Array Industries offers a broad range of Emissions Control systems for Noise, Pollution, Odor and or Heat challenges for industrial customers. The projects are designed, built and installed onsite by Array Industries employees.

Rob has been a member of CICIND since the conference in Esbjerg in September 2007. During the years Rob presented several papers related to controlling emissions and saving the environment.

In his role as counsellor Rob would like to emphasize the necessity to invest in research and development of emission control systems. Reducing emissions from burning natural resources is key for a sustainable environment!

Today Rob is CEO of Array Industries. His current focus is the business strategy and the development of new markets and new products.
New Members

Rod Burley,

Mr. Burley is a Canadian born Mechanical Engineer who in 2019 purchased Industrial Chimney Maintenance Inc. (ICM) and now the acting CEO and Director of Projects. ICM performs maintenance and inspection services on commercial and industrial stacks throughout Canada and the Caribbean. Prior to this he worked for around 20 years in the international oil & gas industry as an engineer and project manager on construction and installation of offshore production platforms around the world.

He is married with two young boys and enjoys spending time with family.

Simon Claringbull

Simon Claringbull is an English chartered civil engineer (MICE). Simon initially worked for a civil engineering contractor in construction and heavy civil engineering for six years before moving to the power industry as a consultant. Simon’s role in the power industry has been varied and included project development as lead civil engineer of new build power plants and retrofitting plant modifications such as Selected Catalytic Reduction; project management of demolition, dismantling and construction projects, due diligence studies, production of civil engineering designs and specifications and an asset management inspection engineer.

Throughout his 21 years in the power industry Simon has carried out and led many chimney inspections for both his employer and other power generation companies, producing inspection specifications for rope access contractors, working with rope access contractors and specifying repairs to chimneys. Simon has worked with John Turner to resolve chimney design and performance issues where deemed appropriate.

Simon has been responsible for the inspection of both concrete and steel chimneys of varying sizes, single and multi-flue, serving both gas, oil and coal fired power plants in the UK and abroad. Simon’s project management of plant dismantling has included the controlled removal of chimneys from the top of boilers, while retaining the boilers intact. Simon has project managed full power station demolition (coal and gas stations), including demolition of chimneys using explosives.

Simon has worked in the UK, Ireland, Spain, Portugal, Sweden, Malaysia and Oman.

WANG FENG,

Born in 1990, is a Chinese citizen.

He graduated in 2003 from Suzhou University in Finance with Bachelor degree. He started his career as an International Sales manager in an elevator company and focus on South-Asia market, during this period he participated in many One Belt Road projects.

In 2020, he started his work in Chimney industry as a sales manager.
New Members

Roberto Pezzoni

is an Italian citizen. Born in Bergamo in 1986, he received his university Master's degree in Structural Engineering from University of Bergamo in 2011.

Since 2012 he has been registered as a professional Engineer licensed in Italy.

His professional career started as Site Junior Project Manager for the construction of the new University building in Bergamo.

Then, he started his activities with Chimneys and Refractories International on 2012, initially as Project Engineer in the Technical Department and later as Project Manager for different EPC projects in Italy and Chile.

During 2016-2017 he has been directly involved in the commercial department working shoulder-to-shoulder with the Managing Director and Commercial Manager, from whom he was able to learn and develop the necessary skills required to comply with his actual position of Business Development Manager.

He is married with his wife Roberta. They share the passion for travelling, sport and animals.

John Roadnight,

born in 1983, is an UK citizen.

John is a senior structural engineer working in Wind Turbine Engineering at DNV GL Renewable Energy Advisory, since 2010.

As Technical Lead for Towers, John is responsible for ensuring best practices are followed in the design and assessment of wind turbine towers and leading development of related internal technical working instructions, calculation tools and methodologies. John has worked on numerous tower design projects, both conventional height and tall towers. In recent years this has included increasing involvement in projects to investigate different approaches for analysis of Vortex Induced Vibration (VIV) for wind turbine towers.

With a strong background in finite element analysis, John has worked on numerous wind turbine design projects including detailed modelling of wind turbine structural assemblies and subsequent ultimate and fatigue strength assessments of structural components and bolted connections.