



Progress Report

Most Recent Engagements

Professor Ziarati, the MariFuture General Coordinator and C4FF Chair, attended the Air Quality Summit organised by the Leamington Town Councillor, Susan Rasmessun, and the Member of Parliament for Leamington and Warwick, Mr Matt Western MP. Professor Ziarati's presentation and slides can be found in the MariFuture Article for October 2019.

The following is the Summit Programme –

Warwick and Leamington Air Quality Summit 2019 Agenda

13:00 – Refreshments

13:30 - Introduction by Matt Western MP

13:35 - Dr. Nadia Inglis on the public health impact of poor air quality

13:43 - Dr. Oliver Lawton on getting active and the health economy

13:51 – **FIRST PANEL QUESTION AND ANSWER SESSION (10 minutes)**

14:01 - Adrian Hart (WCC) and Alan Law (WCC) on Warwickshire County Council's current initiatives, the challenges of air pollution and the opportunities for change

14:11 - Professor Reza Ziarati on the need for an independent office for monitoring air quality locally and other solutions

14:19 - **SECOND PANEL QUESTION AND ANSWER SESSION (10 minutes)**

14:29 - Councillor Alex Hollingsworth (Oxford City Council) on the Zero Emission Zone in Oxford

14:44 – Matt Western MP on proposals for the Leamington Transport Hub

14:52 - Annabel Precious on Clean Air for Leamington's vision for sustainable transport in Leamington

15:02 – **SUMMIT-WIDE DISCUSSION**

15:25 – **Concluding remarks by Matt Western MP**

This year Professor Ziarati will be chairing and organising the Midlands Engineering Dinner. C4FF has been hosting several meetings of the organising committee as its offices in Kenilworth.

The event poster is as follows:



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Institution of MECHANICAL ENGINEERS Main sponsor: **LIBERTY**

MIDLANDS ENGINEERING DINNER
Friday 18th October 2019

The National Conference Centre, Solihull B92 0EJ

4.00 – 6.00 free visit to museum
6.00 – 7.00 pre-dinner reception
7.00 – 10.30 dinner
11.15 - bar closed

Please join us for the Midlands Engineering Dinner, open to all our engineering colleagues. Our premier social event promoting engineering and academic excellence. An opportunity for both individuals and companies to meet, network and enjoy the occasion. There is also the opportunity to visit for free the Motorcycle Museum which celebrates many great engineering achievements. Our theme of "Innovation in the Supply Chain". Several companies will be showing their support for their future engineers with special displays in the hall. Key note speakers from Liberty Industries and Warwick Manufacturing Group. 2019 dinner charity - Birmingham Children Hospital

Dinner Ticket Prices: Members and Guests £55 - Young Engineers £45
Dress code: Black tie or lounge suits.
Ticket includes free admission to adjacent National Motorcycle Museum

For more information on the Dinner and sponsorship opportunities contact: Drew Taggart, IMechE Midland Chairman, drew@thistlemanagement.com
Reza Ziarati, Chair Midland Engineering Dinner, reza.ziarati@c4ff.co.uk

To purchase tickets: <https://nearyou.imeche.org/eventdetail?id=16671>

Liberty our main sponsor, part of the GFG Alliance, is a fully integrated international steel and mining group, specialising in commodities trading, raw materials production as well as the manufacturing and distribution of steel, engineered components and associated services. The company enables young engineers to gain professional standards through its training programmes and apprentice scheme.

All those who would wish to attend please use the link provided to contact Professor Ziarati at reza.ziarati@c4ff.co.uk

The event brings in the three worlds of Engineering Institutions, Industry and Academia in the region together. The following is a list of companies exhibiting at the event. The final programme is also given below.

List of Exhibitors –



MOOG Aircraft brings technology which delivers sustainability, flexibility and reliability. We design and manufacture high-performance motion control solutions for a wide variety of industrial applications.

IET Coventry and Warwickshire Network supporting future engineers

IMAGINEERING FOUNDATION introduce young people to the exciting world of engineering, science and technology



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Precision Farm Engineering - Hands Free Hectare - Automated machines growing the first arable crop remotely, without operators in the driving seats or agronomists on the ground.

Maritime Research and Development, Hybrid systems development.

With a history stretching back more than 85 years, Perkins is one of the world's leading providers of gas engines. We aim to set standards of engineering excellence.

World class supplier of high-quality precision machined components supporting repeater, stranger and alien demands for the aerospace and advanced engineering markets.

Our purpose is to serve our customers and communities. This drives our vision to be the most trusted water company by 2020 and every year thereafter.

We're collaborating with global businesses, entrepreneurs, and leaders to deliver solutions that make a big impact on economic growth, society and the environment.

Centre for Factories of the Future (C4FF), deliver Business Intelligence Systems, application of artificial intelligence.

MTC provide on an industrial scale, a unique opportunity for manufacturers to develop new and innovative processes and technologies. The MTC is part of the High Value Manufacturing Catapult, supported by Innovate UK.

Each year the IMechE organises a Design Challenge for 1st and 2nd year undergraduates. This year Coventry University will demonstrate their winning design.

2019 Event Programme - Final

4.00pm – Museum open for Visitor Viewing

6:00pm – Drinks Reception

A unique opportunity to view the display of engineering skills and technical developments

New products, cutting edge technology

Meet the engineers behind the products

7:00pm – Call to Dinner

Welcome – Professor Dr Reza Ziarati

Chair – Midland Engineering Dinner

Opening address – Anthony Blackwell MSc

Liberty Engineering Division Chief Technology Officer

Short presentation from the Birmingham Children's Hospital

Grace

Following main course, a collection of raffle donations

9:30pm (approx.) – Guest Speaker

Professor Jan Godsell

Professor of Operations and Supply Chain Strategy

WMG, University of Warwick

Loyal Toast

11:15pm – Bar Closes

The evening was a great success and many people attended. It was felt that the venue was a fantastic place to host the event, so thank you to the National Conference Centre at Solihull. There were some brilliant and interesting speakers for the evening. The raffle was participated by many of the attendees and we hope that the Children's Hospital is able to make positive changes to enable their important and vital work that they do.



Figure 1: Shows attendees at the drinks reception and viewing the stands set up by the exhibitors. Left to Right: Mrs Katie Parker (Personal and Project Assistant at C4FF), Amir Ziarati (Business Consultant), Zena Ziarati (C4FF Finance Director), Lakhvir Singh (C4FF Managing Director), Jeremy Howell (Operations Director at Goodfoot) and Linda Howell (Senior Nurse and Jeremy's Wife)

C4FF will be supporting the next air quality summit organised by Climate Change Solutions. A copy of the events poster is presented below.

RESPONDING LOCALLY TO THE 2030 UN GLOBAL CLIMATE CHANGE EMERGENCY
MAKING COVENTRY'S CLEAN - GREEN FUTURE
09:30AM - 12:30PM SATURDAY 26 OCTOBER 2019
METHODIST CENTRAL HALL, WARWICK LANE, COVENTRY CV1 2HA

The UN science-based climate emergency requires 50% cut in current carbon emissions by 2030 to contain global warming within 1.5 degrees so avert irreversible catastrophe for life on earth. Coventry, as other cities, recognises the dual challenge to urgently address local atmospheric pollution and global warming from using fossil fuels. The common solutions is replacing with clean energy and technologies with mostly being generated locally, combined with resource efficiency.

Chair: Tony McNally
Managing Director Climate Change Solutions Ltd

Clr Jim O'Boyle
Coventry City Council Cabinet Member
Jobs & Regeneration Member of Coventry & Warwickshire Local Enterprise Board

Susan Juned
Director of Heat of England
Community Energy Ltd

Darren Gardner
Head of Business Development E.ON UK

Tom Bradley
External Affairs Manager Cadent Ltd

Dr Nadia Inglis
Public Health Consultant
Health Protection Coventry & Warwickshire

Amanda Roberts
Environment and Green Futures Manager
Coventry City of Culture

Jane Nellist
President of Coventry Trade Union Council
and National Education Union Member

Claire Perry MP (invited)
President COP 26
UK Host United Nations Climate Change Summit
November 2020

Coventry School Student (s)
tbc (invited-not yet confirmed)

CLIMATE EMERGENCY CHANGE

We are at a unique stage in our history. Never before have we had such an awareness of what we are doing to the planet. We all have a responsibility to care for our Blue Planet. The future of humanity and indeed, all life on earth, now depends on us.

Sir David Attenborough

We need to start living within the planetary boundaries. Focus on equity and take a few steps back for the sake of all living species. We need to protect the biosphere, the air, the oceans, the soil, the forests.

Greta Thunberg

REGISTER FREE <https://www.eventbrite.co.uk/e/making-coventrys-clean-green-future-tickets-71254121997>

WE ARE COVENTRY
COVENTRY CITY OF CULTURE

WARWICK
UNIVERSITY

Coventry University

Coventry
SOCIETY
RETURN
NETWORK

Year of Efficient Ship

MariFuture is continuing with the publication of a Development Paper each month throughout 2019 in support of the 'Year of Efficient Ship' due to the importance of the subject in order to make our members and partners aware of the impact of toxic pollutants from shipping; and the means available to us to reduce the level and amounts of the emissions from ships to a minimum level. In



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parallel, we will publish the results of our air quality research carried out to investigate the air quality in several cities and towns, focusing mainly in the UK.

New accepted EU funded Projects

GreenShip - This is a continuation of MariEMS initiative. The presentation at IMO at the HTW6 on 29th April 2019 by Capt. Zak (Solent University) and Professor Ziarati (C4FF, General Coordinator of MariFuture) describing how the MariEMS e-learning training courses can be accessed and used online, created a great deal of interest from several countries. This led to a review of a recently submitted proposal viz., GreenShip, to EU's Erasmus+ programme with a view to incorporate several countries as associated members.

This project is expected to start in October 2019 when the details will be published in MariFuture. The visit kick-off meeting is being arranged to take place in Barcelona on 9-11 December 2019.

PROMETHEUS - This proposal was accepted in mid- August 2019 and concerns the mental well being of ship crew. The project is expected to start in October 2019. There will be more information on this exciting opportunity in October issue. The first meeting of the partners is scheduled 18-19 November 2019 in Athens.

PolyUniBus – This project concerns the policy making at the highest levels in bringing the two worlds of academia and industry together. This project is expected to start in October 2019. The details of the project and partnership will be reported in the October issue.

Mentor – The Mentor project partner meeting took place in Kenilworth on 10-11th April 2019. The first workshop of the project was held on 10th April 2019 at Warwick University. C4FF coordinated the meetings during the two-day event and took the lead in the workshop activities. More information about the project and the meeting are provided in the Mentor project section below.

The third meeting of this project took place on 26-27 September 2019 in Switzerland.

ACTS Plus

The project assessment concluded in July 2019. The project received a grade of 8.1 which is considered a high grade. C4FF took a lead in preparing the final report. The project has commenced its post funding period in April 2019. The new simulator facilities the Solent University which was reported to be one of the best in the world and the ACTS Plus Advanced eCOLREGS (www.advanced.ecolregs.com) will be implemented at the university when the new simulator system centre is fully operational.

New Papers for major International conferences

Two new papers were prepared and submitted to the International Maritime Lecturers Association Conference in Georgia which took place in October 2019. One concerns Maritime English reporting on the work carried out in MariLANG project and the second is on the outcomes of the ACTS Plus project. As reported earlier Capt. Zakirul (Solent University) and Professor Ziarati (C4FF, General Coordinator of MariFuture) jointly presented the MariEMS Project and Courses for 'ship energy management trainees and trainers' to the participant at the IMO HTW6 meeting. The presentation was organised and authorised by the UK Maritime Coastguard Agency (MCA). Both Capt. Zakirul and



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Professor Reza attended the HTW6 as a member of UK delegation. The project partners would wish to thank MCA and IMO for this opportunity. The following are several photos from the event. Other MariFuture projects and new proposals were discussed during the visit to IMO with interested parties. A third paper is being prepared on RZ Multiple-choice which relates to the confidence assessment which removes the guessing dilemma in answering these types of questions in tests and examinations. The technique has played a major role in re-introduction of multiple-choice questions in e-learning applications.

Cyber Security

New projects are being developed and a meeting with leading IT specialists have been arranged for July 2019 at C4FF. There will be an announcement on the formation of a Cyber Security team in the near future.

New Internships opportunities at C4FF

Internship Opportunity at C4FF has created several Internships for young people seeking industrial placements. The following photo shows Dr Lakhvir Singh, MD, with Patrycia Piotrowsk, studying at Politechnika Wroclawska, Wroclaw, Poland completion of her third year of degree study.



Air Quality Group and Conference

C4FF has been supporting the Air Quality Group on the region and helped to organised its first meeting at Coventry University on 21 June 2019. To mark the UNICEF Air Quality Day, C4FF organised a reception at Berkeley House on 20th June 2019. The conference observation report is published as the Article in MariFuture's June 2019 issue and the conference summary report is published as MariFuture June 2019 Paper.



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C4FF has also presented at the 'Air Quality Summit' chaired by Warwick and Leamington's MP Matt Western, held at Leamington town hall on Friday 11th October 2019. Please see the website attached below for further details published in the local newspaper, The Courier.

https://www.leamingtoncourier.co.uk/news/people/transport-hub-and-clean-air-zone-among-ideas-shared-at-summit-to-tackle-pollution-problems-in-leamington-and-warwick-1-9109401?fbclid=IwAR1SsAk-jgra3tGKO1YmCzEKshEk27OwiGDdmcVwTLfM_OESnEIWxl6vEQ8

Mentor Project

The last partner meeting took place in Lausanne, Switzerland on 25-26 September 2019.

The #Mentor4WBL@EU Project was designed after the European Council prompted the EU Member States to increase "substantially the number of apprenticeships and traineeships to ensure that they represent real opportunities for young people, in cooperation with social partners and where possible integrated into education programmes". In addition, according to the newly adopted "European Framework for Quality and Effective Apprenticeships" (October 2017), European Commission identifies 14 key criteria that Member States and stakeholders should use to develop quality and effective apprenticeships. Among the specific criteria, is made a concrete reference on the necessity to exist a specific procedure for teachers, trainers and in company mentors to "update their skills and competences in order to train apprentices according to the latest teaching and training methods and labour market needs". In-company WBL mentors are in the core of quality WBL. However, in most European countries, they lack standardized support and guidance which will set the expectations and boundaries clarifying and ensuring their successful contribution in the learning process. Based on the above and the identification of the WBL needs and gaps by NetWBL, there is a significant need for the development of standards and qualifications that would identify certain knowledge, skills and competences. They should also provide adequate assessment that will lead to valid certification and August 2019 marifuture.org News ensure quality in-company WBL mentorship in enterprises providing apprenticeships and internships. More information about the project will be available on the project website when it is published. The project meeting of Mentor took place in Kenilworth, 10-11th April 2019. The first workshop of the project was held on 10th April 2019 at Warwick University. C4FF coordinated the meetings during the two-day event and take a lead in the workshop.

Career Comeback Support Program for Women's Project

The Career Comeback Support Program for Women's project was concluded in September 2019 and the final report submitted to the Turkish National Agency. The partners are awaiting the outcome of the assessment by the EU.

Career Comeback Support Program for Women (CCSP-W) The project started in September 2016. The partners have met in Istanbul, Kenilworth and Paris. The fourth partner meeting took place in



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Poland on 24-25 May. The subsequent meeting took place in Paris, France on 18-19 October 2018. The project is progressing well and is being implemented as outlined in the proposal. The project partners met in Paris, France on 18-19 October 2018 to discuss the progress and plan for future activities.

UniBus

The international project partner meeting took place at Liverpool University London campus, UK, on 16-17 May 2019, the partners have made good progress on IO3 and IO4 UniBus Cloud Platform.

Kenilworth Expo

C4FF attended and presented the company at the Kenilworth Expo this year. We were able to explain the service and what it entails. It was a great opportunity to promote our business but also create links to other local services and business across the board to either utilise our service or to understand other companies that maybe able to work with us or support our work. Please see the photos attached showing our interaction with Jeremy Wright (Member of Parliament for Kenilworth and Southam) and our business promotion.

