iGROW Events

World class event in the last month of Ireland Presidency of the EU Council 2013

18 – 19 June 2013
European Union House
Dublin - Ireland

Ecosystem for Sustainable Growth Services Workshop 2013 (ESGS13)

Workshop Booklet of Invited Speakers

Edited by
ESGS13 Organizer and Program Chair
Dr. Soha Maad
Founder and Manager, IGROW EEIG
Integrated Technologies and Services for Sustainable Growth
European Economic Interest Grouping (EEIG)

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I would like to thank all our invited speakers for their valuable contribution to ESGS13. Your response on time was much appreciated.

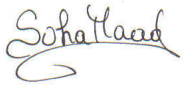
I would like also to thank Fáilte Ireland / www.meetinireland.com for supporting the printing of this workshop booklet.

I am grateful to my family, my mother and my sisters, and my colleagues who encouraged me and helped me in making this work a success.

Thanks God for giving me the strength to achieve this work which I hope will meet the expectations of our distinguished invited speakers and participants.

I look forward to welcome you all at ESGS13. I hope this event will be an opportunity for all of us to share best practices, put a joint action plan, and show case Ireland and international efforts towards sustainable growth and economic prospect.

Yours Sincerely



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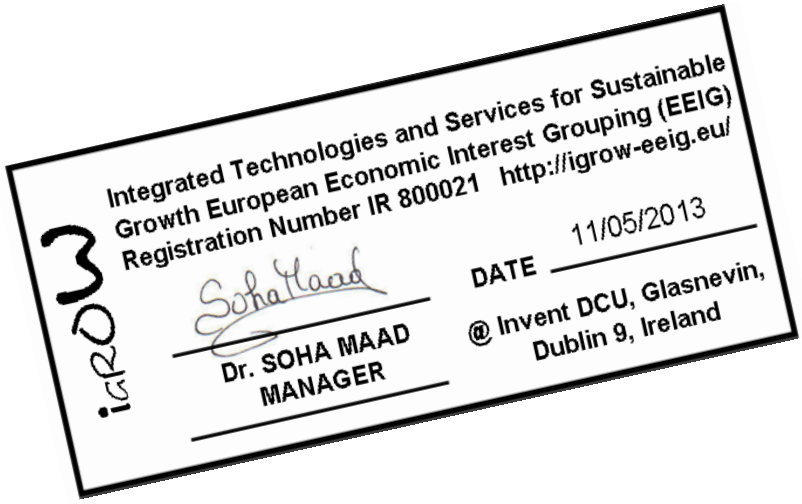


International Committee

Name	Institution	Country
Dr. Nizar Ayadi	Alicante	Spain
Dr. Meurig Beynon	University of Warwick	United Kingdom
Mr Luk Vervenne	Harvestroad.com, Synergetics	Australia, Belgium
Dr. Steve Russ	University of Warwick	United Kingdom
Dr. Samir Garbaya	ENSAM ParisTech Art & Metiers	France
Prof Oliver James	IOWA State University	USA
Prof Zahir Irani	Brunel University	United Kingdom
Dr. Luigi Pomante	Università degli Studi dell'Aquila – Center of Excellence DEWS	Italy
Mr. Frank Schmitz	Konrad-Zuse-Zentrum für Informationstechnik Berlin	Germany
Prof Abdullah Bin Ibrahim Al-Saadat	King Faisal University	Saudi Arabia
Mr. Masoud J Al Marri	Ministry of Environment in Qatar	Qatar
Prof Abdallah Omezzine	Nizwa University	Oman
Mr. Kalev Narep	RICHARDI	Estonia
Dr. ElHadj Benkhelifa	Staffordshire University	UK
Mr. Olivier Rieux	VERTECH GROUP	France
Mr. Harold Weffer	Eindhoven University of Technology	Netherlands
Mr. Rafael Abad	Foundation HABITEC	Spain
Prof Todd Kent	Texas A&M University in Qatar	Qatar
Prof Ebrahim Mohammed Janahi	University of Bahrain	Bahrain

Event Description

The **"Ecosystem for Sustainable Growth Services Workshop 2013 - ESGS13"** (http://www.igrow-eeig.eu/ESGS2013/)) will bring together key experts from a wide range of disciplines to deliver state of the art knowledge and latest advances in the areas of enabling tools and technologies (including cloud computing, machine vision, decision support, and mobile technologies) to address world resources scarcity challenge in energy, food, water, and other environmental resources. Technologies for preventive healthcare, active and healthy eco-life style will be also presented. Given its trans-disciplinary nature, ESGS13 is intended to attract participants from all over the world. It will be an opportunity to share best practices, put a joint action plan, and show case Ireland and international efforts towards sustainable growth.
The ESGS2013 workshop scope will cover various topics each presented in a workshop session. These topics are:
Topic 1 – Session 1. Enabling Tools and Technologies: this topic will explore the potential of latest advances in cloud computing, machine vision, decision support, media, knowledge management, and mobile technologies to address the resources scarcity challenge.
Topic 2 – Session 2. Resources scarcity challenges in the food sector: this topic will address vital issues such as food health and safety, the use of biotechnology in the food sector, and decision support technologies for equitable pricing and distribution of food resources. Leveraging the computational power of cloud computing and machine vision to advance and promote food health and safety will be addressed. Participants will be encouraged to present and share case studies, from around the world, describing best practices of the use of technologies to address food scarcity problem.
Topic 3 – Session 3. Resources scarcity challenges in the energy sector: this topic will cover technologies for management of energy consumption and the development of alternative sources of energy. Participants will be encouraged to present and share case studies and success stories from Ireland and other countries, in the management of energy resources. National plans to attain various energy efficiency targets will be presented and discussed.
Topic 4 – Session 4. Resources scarcity challenge in the water sector: this topic will cover information and computer based technologies to manage water resources on the demand and supply sides. On the demand side, the use of various tools and technologies for efficient water metering, raising public awareness of efficient use of water, and the control of water consumption will be presented. On the supply side, computer based technologies to ensure water purity, wastewater treatment, and flood risk monitoring will be presented. Participants will be encouraged to present and share case studies and national and international plans to address the challenge of water scarcity and ageing water infrastructures.
Topic 5 – Session 5. The promotion of eco active and healthy life style: this topic will cover various media based technologies to promote preventive healthcare and motivate an eco, active, and healthy life style. Participants with primary care and ICT background will be encouraged to present and demonstrate technologies to promote active and healthy life style.

AGENDA

Day 1 - Tuesday 18 June 2013	
9:30 - 10:00	Registration and coffee
10:00 - 10:30	Opening (workshop chair – *Dr. Soha Maad*)
	Mr. Timothy HAYES, Introductory remarks - European Commission, Representation in Ireland
10:30 - 13:00	**Keynote session** • *Dr. Leonidas Karapiperis*, European Commission • *Dr. Manus Ward, Science Foundation Ireland* • *Mr Greg Swift,* Dublin City Enterprise Board • *Dr. Abdul Sattar Al-Taie,* Qatar National Research Fund • *Mr Luk Vervenne*, Synergetics N.V. • *Dr. Meurig Beynon*, Warwick University
13:00 - 14:00	Lunch
14:00 - 15:30	**Session 1:** Enabling Tools and Technologies for Sustainable Growth **Session 2.** ICT to address the resources scarcity challenges in the food sector **Session 3.** ICT to address the resources scarcity challenges in the energy sector
15:30 - 15:45	Coffee break
15:45- 16:50	**Session 4.** ICT to address the resources scarcity challenge in the water sector **Session 5.** ICT for the promotion of eco active and healthy life style
16:50-17:00	Close day 1

AGENDA

Day 2 - Wednesday 19 June 2013	
9:30 - 10:00	Registration and Coffee
10:00- 12:00	**Panel Discussion**
1200 - 14:00	Lunch break
14:00-16:00	Networking Session
	Close day 2

SESSIONS

Session 1: Enabling Tools and Technologies for Sustainable Growth
Dr. Luigi Pomante, Wireless Sensor Networks Applications to Support Sustainable Growth Services
Dr. ElHadj Benkhelifa, Cloud Computing, Big Data and the Internet of Things: The Crossroads for Sustainable Growth

Session 2. ICT to address the resources scarcity challenges in food sector
Dr. Ali El Kharbotly, Food security and safety in Qatar challenges to be met
Prof. Abdallah Omezzine, Land Tenure issues and food security

SESSIONS

Session 3. ICT to address resources scarcity challenges in energy sector
Fernando Centeno, Challenges and opportunities in building energy efficiency enhancements
Mr. Rafael Abad, Technology, Information and Communication services for engaging social housing residents in energy and water efficiency (EnergyTIC)

Session 4. ICT to address resources scarcity challenge in water sector
Mr. Antonio BARONA, International Cooperation Experiences in the Environmental Technology Sector
Mr. Ruben van der Zwan, Licensing water extraction and discharge with SOA and BRE within the Dutch Local Government

Session 5. ICT for the promotion of eco active and healthy life style
Dr. Stefano Tennina, Wireless sensor networks for quality of life
Dr. Soha Maad, ICT for preventive healthcare and active and eco-life style

VENUE

European Union House in Dublin

The Ecosystem for Sustainable Growth Services Workshop 2013 ESGS13 will be held on 18 - 19 June 2013 at the European Union House, 18 Dawson Street, Dublin 2 - Ireland.

The venue is located at the heart of city center with easy access to public transport and air coach to the airport.

For further information on the venue, access, and nearby hotel accommodation please visit the webpage of the ESGS13 workshop at http://www.igrow-eeig.eu/ESGS2013/.

ESGS13 LIST OF INVITED SPEAKERS

No.	Speaker	Institution	Country
1	Mr. Timothy HAYES	European Commission, Representation in Ireland	Ireland
2	Dr. Leonidas Karapiperis	European Commission, DG Research and Innovation	Belgium
3	Dr. Manus Ward	Science Foundation Ireland	Ireland
4	Mr. Greg Swift	Dublin City Enterprise Board	Ireland
5	Dr. Abdul Sattar Al-Taie	Qatar National Research Fund (QNRF), Qatar Foundation	Qatar
6	Mr. Luk Vervenne	Synergetics nv – Harvestroad.com	Belgium and Australia
7	Dr. Meurig Beynon	University of Warwick	United Kingdom
8	Dr. Luigi Pomante	Università degli Studi dell'Aquila – Center of Excellence DEWS	Italy
9	Dr. Elhadj Benkhelifa	Staffordshire University	United Kingdom
10	Dr. Ali El Kharbotly	Biotechnology Center, Ministry of Environment, Qatar	Qatar
11	Prof Abdallah Omezzine	University of Nizwa	Oman
12	Mr. Fernando Centeno	Exergy Ltd	United Kingdom
13	Mr. Rafael Abad	HABITEC Foundation	Spain
14	Mr. Antonio Barona	Vertech Group	France
15	Mr. Ruben van der Zwan	Yenlo B.V.	Netherlands
16	Dr. Stefano Tennina	WEST Aquila s.r.l.	Italy
17	Dr. Soha Maad	IGROW EEIG	Ireland

Invited Speaker

Title: Mr
Name: Timothy
Surname: HAYES
Post held: Head of Information/Communication
Institution: European Commission
Postal address: 18 Dawson Street, Dublin 2, Ireland
Email: mailto:eu-ie-info-request@ec.europa.eu
Tel:+353 *(0) (1) 634 11 11*

Invited Speaker Profile

Timothy is a career official and has worked with the European Commission since 1993. He joined the European Commission Representation in Ireland in April 2009 where he is Head of Information and Communication.

Brief Summary of the presentation

Title of the presentation:

Introductory remarks

Invited Speaker
Title:Dr.
Name: Leonidas
Surname: Karapiperis
Post held: Advisor - Relations with International organisations
Institution: European Commission, DG Research and Innovation
Postal address: Brussels 1049, Belgium
Email: leonidas.karapiperis@ec.europa.eu
Tel: +32-2-22953243

Invited Speaker Profile

Leonidas Karapiperis was born in Thessaloniki, Greece, in 1952. He holds a B.Sc. in mathematical physics from Sussex University, U.K., and a Ph.D. in physics from Cornell University, U.S.A. After seven years as researcher at Thomson-CSF, France, he joined the European Commission's information technology ESPRIT programme in 1988, and in 1993 moved to the Directorate-General for Research to work on international S&T relations. From 1995-1999 he was at the Delegation of the European Commission in Japan as Press and Cultural Counsellor. Since 1999 he is Advisor at the Directorate-General for Research and Innovation and has worked on the development of successive Research Framework Programmes, the coordination with European intergovernmental research organisations, international cooperation, and the development of new initiatives in the context of the European Research Area. He has represented the European Commission on the CERN Council and continues doing on the OECD Global Science Forum. He is currently responsible for relations with International Organisations.

Brief Summary of the presentation

Title of the presentation: "Horizon 2020 and its international cooperation agenda"
Keywords: Horizon 2020, international cooperation, sustainable development
Workshop Session: Keynote Session
Brief summary of the presentation:
Horizon 2020 is the financial instrument implementing the Innovation Union[2], a Europe 2020[3] flagship initiative aimed at securing Europe's global competitiveness. Running from 2014 to 2020 with an €80 billion budget, the EU's new programme for research and innovation is part of the drive to create new growth and jobs in Europe.
The proposed support for research and innovation under Horizon 2020 will:

- Strengthen the EU's position in science.
- Strengthen industrial leadership in innovation. This includes major investment in key technologies, greater access to capital and support for SMEs.
- Address major concerns shared by Europeans, as well as all over the globe, such as climate change, developing sustainable transport and mobility, making renewable energy more affordable, ensuring food safety and security, or coping with the challenge of an ageing population.

Horizon 2020 will tackle societal challenges by helping to bridge the gap between research and the market by, for example, helping innovative enterprise to develop their technological breakthroughs into viable products with real commercial potential.

This market-driven approach will include creating partnerships with the private sector and Member States to bring together the resources needed.

Sustainable development will be an overarching objective of Horizon 2020. The dedicated funding for climate action and resource efficiency will be complemented through the other specific objectives of Horizon 2020 with the result that at least 60 % of the total Horizon 2020 budget will be related to sustainable development, the vast majority of this expenditure contributing to mutually reinforcing climate and environmental objectives. It is expected that around 35% of the Horizon 2020 budget will be climate related expenditure.

International cooperation will be an important cross-cutting priority of Horizon 2020. In addition to Horizon 2020 being fully open to international participation, targeted actions with key partner countries and regions will focus on the EU's strategic priorities.

Invited Speaker

Title: Dr.
Name: Manus
Surname: Ward
Post held: Policy and Strategy Manager
Institution: Science Foundation Ireland
Postal address: Wilton Park House, Wilton Place, Dublin 2
Email: manus.ward@sfi.ie
Tel: +35316073230

Invited Speaker Profile

Dr Ward graduated from the University of Ulster with a degree in Biomedical Sciences in 1996. He then went on to gain his PhD and carry out a short postdoctoral fellowship in the University of Dundee where his research focused on changes in mitochondrial energetics and calcium signaling during excitotoxic neuronal injury. In 2001, Dr Ward accepted a position as a R&D research scientist in MitoKor, a small biotech company based in San Diego that focused on the elucidation of mitochondrial targets for drug development. In 2003 Dr Ward returned to Ireland as an SFI funded Postdoctoral Fellow and worked in Prof Jochen Prehn's group in the Royal College of Surgeons in Ireland (RCSI). Dr Ward was promoted to Lecturer in September 2005 and went on to set up his own group within the department of Physiology and Medical Physics at the RCSI. Since 2009 Dr Ward has worked in Science Foundation Ireland as a Scientific Programme Manager and has recently (April 2013) taken up the role of Strategy and Policy Manager in SFI.

Brief Summary of the presentation

Title of the presentation: Science Foundation Ireland and International Engagement
Keywords: International, Engagement, Science
Workshop Session: Keynote Session
Brief summary of the presentation:
The presentation will go over strategic plans of Science Foundation Ireland for international engagement.

Science Foundation Ireland (SFI http://www.sfi.ie/) invests in academic researchers and research teams who are most likely to generate new knowledge, leading edge technologies and competitive enterprises in the fields of science and engineering underpinning three broad areas:
- Biotechnology (BIO)
- Information and communications technology (ICT)
- Sustainable energy and energy-efficient technologies (ENERGY)

SFI makes grants based upon the merit review of distinguished scientists. SFI also advances co-operative efforts among education, government, and industry that support its fields of emphasis and promotes Ireland's ensuing achievements around the world.

Invited Speaker

Title: Mr
Name: Greg
Surname: Swift
Post held: CEO
Institution: Dublin City Enterprise Board
Postal address:5th Floor O'Connell Bridge House, D'Olier Street, Dublin 2
Email: gswift@dceb.ie
Tel: 0035316351144

Invited Speaker Profile

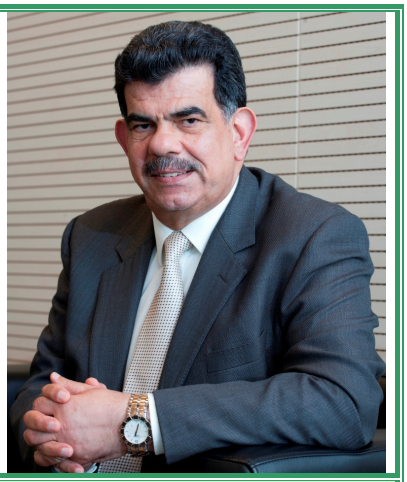
Greg Swift is CEO of Dublin City Enterprise Board, since 2005, the Enterprise Support Agency, involved in supporting and developing an enterprise culture in Dublin City. He previously was CEO in Plato Dublin, Management Development Network part of an EU wide network for SMEs. He is also on several related Boards including where he is Vice Chair of the National CEB Network include Dublin, Plato Dublin and Plato Ireland and is on the Skillnets Management Works Advisory Group. He did an BA Mgmt. IMI and MBA UCD.

Brief Summary of the presentation

Title of the presentation: Enterprise Supports in Dublin City and Ireland
Keywords: Enterprise, Start ups, Innovation
Workshop Session: Keynote Session
Brief summary of the presentation:
The structure of enterprise support in Ireland and the role of county enterprise boards in supporting micro enterprises, raising entrepreneurial skills and fostering innovation and economic growth.
The importance of enterprise promotion
Contributions that Enterprise makes to our city: Enterprise Culture; Jobs; Growth; Competition
Entrepreneurship is where Entrepreneurs are -Risk bearer -Decision taking
Decision -opportunity / opportunity; The Intuition of the Entrepreneur; See things differently, connect up the dots... Failure is just form of Learning R&D
Changing Economic environment; Improve business success rates; No single policy; Enterprise space; Speed of change
Getting Funding; Range of supports for business
-Exporting
-Innovation
-Manufacturing
Support for ICT business; Information ; Access to markets; Expertise and advise
Innovation vouchers –EI university research access; Patents
Emerging Sectoral support
New wave firms_ -food & drink –health –environment and energy -creative enterprise –IT –craft –multimedia-tourism.

Invited Speaker

Title: Dr
Name: Abdul Sattar
Surname: Al-Taie
Post held: Executive Director
Institution: Qatar National Research Fund
Postal address: PO Box: 5825 Doha – Qatar
Email: aaltaie@qf.org.qa
Tel: +974 445-40950/ +974 445-48070



Invited Speaker Profile

Dr Abdul Sattar Al-Taie is the founding Director and currently the Executive Director of Qatar National Research Fund (QNRF).
He holds BSc (Hons), MSc, ACGI, DIC and PhD in Chemical Engineering from Imperial College of Science and Technology, University of London.
Prior to his formative work with QNRF, Dr Abdul Sattar Al-Taie held a number of key positions in Iraq with the Ministry of Oil, the Iraqi Atomic Energy Commission and the Ministry of Industry and Minerals and was a key player in a number of strategic initiatives and research and technology transfer programs in Iraq. He also taught in a number of universities in Iraq and supervised a number of PhD and MSc students. During his career, he has published more than 40 research and technical papers, and more than 50 technical reports.
Dr Al-Taie has received numerous awards and decorations in his career, including the Jabir Bin Hayyan Medal, the Reconstruction Medal and the prestigious Science Medal of the Republic of Iraq.
In his current role as Executive Director of QNRF, Dr Al-Taie is responsible for the successful leadership and management of QNRF's mission to advance knowledge and education for Qatar by supporting original, competitively-selected research in all fields of science, with emphasis on the four pillars of the Qatar National Research Strategy: energy and environment, computer sciences and ICT, health and social sciences, arts and humanities.
Dr Al-Taie oversees the strategic planning, implementation and evaluation of QNRF's activities and ensures that the funding agency's work is aligned with the vision of Qatar Foundation's Research & Development establishment to position Qatar as a leading centre for research and development excellence and innovation.

Brief Summary of the presentation

Title of the presentation: International Research Collaboration for Sustainable Growth
Keywords: Research, International Collaboration, Challenges, Sustainability, Qatar, QNRF
Workshop Session: Keynote Session
Brief summary of the presentation: Dr Abdul Sattar Al-Taie will provide information on current and planned QNRF funding programs, with a focus on opportunities for international collaboration. He will also explain QNRF's model for international collaboration, identify the challenges involved in international collaboration, and how such collaboration has contributed to Qatar's research development.

Invited Speaker

Title: Personal Data Ecosystem for Life Management
Name: Luk
Surname: Vervenne
Post held: CEO
Institution: Synergetics nv – Harvestroad.com
Postal address: Terlinckstraat 75, Antwerp BE
Email: luk@synergetics.be

Invited Speaker Profile

Luk Vervenne is a Belgian Internet entrepreneur. He founded NetVision.be (1993), currently Cybertrust.com, Synergetics.be (1994) and Globalsign.com, (1996), Europe's first Digital Certificate Authority. He is currently CEO of Harvestroad.com (Perth, Australia), and Synergetics nv.

He is chair of the Competency Workgroups of IEEE en HR-XML and he is currently active in the technological innovation around ***Personal Data Ecosystems***.

As such he is a core member of the World Economic Forum's "Rethinking Personal Data" project. (http://www.weforum.org/issues/rethinking-personal-data) and was an initiator and manager of several major European and commercial innovation and research projects.

Brief Summary of the presentation

Title of the presentation: Life Management Ecosystems
Keywords: personal data ecosystems, health, work, consumer, privacy, trust
Workshop Session: Keynote Session
Brief summary of the presentation:

Five hundred years after the Renaissance, the individual - in his role as citizen, patient, worker, consumer, ...etc - is finally being accepted as a genuine stakeholder in his own processes. This requires new personal infrastructure, which allows the individual to become the ethical integration point of his own data.

We show how to build Regional Personal Data Ecosystems for the health, work and consumer domain, based on international standards for trust, security and privacy, ontologies, advanced analytics and content management. The ecosystem solutions are currently all underway of being piloted in the Eindhoven region in the Netherlands and are intended to innovate the citizens Life Management processes supported by end2end trust assurance, intelligence and content management services.

Invited Speaker

Title: Dr
Name: Meurig
Surname: Beynon
Post held: Reader Emeritus
Institution: University of Warwick
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Email: wmb@dcs.warwick.ac.uk
Tel: +44 24 7652 3089

Invited Speaker Profile

Dr Beynon is an Emeritus Reader in Computer Science at the University of Warwick, UK where he now focuses on research and teaching in Empirical Modelling, an area which he established and has developed in collaboration with his colleague Dr Steve Russ and some twenty research students over the last 25 years. Over his career, he has published about 120 refereed research papers detailing his research contributions to mathematics (with particular reference to the discovery of the Baker-Beynon duality), to theoretical computer science (including the introduction of a notion of computational equivalence, and its application to the characterisation of boolean functions computable by planar monotone circuits) and to Empirical Modelling, a body of principles and tools that offers an alternative conceptual framework for computing with applications to human-computer interaction, computer graphics and CAD, software development, decision-support, educational technology and humanities computing.

Brief Summary of the presentation

Title of the presentation: Reconciling computing with knowing
*Keywords:*computational thinking, human aspects of computing, construal
Workshop Session: Keynote Session
Brief summary of the presentation:
The theoretical roots of computing lie in *computational thinking*. A major concern for computation is efficiency. As computers invade every aspect of our lives, so does the influence of computational thinking. Making computation more efficient is one way in which we can strive to save resources. On the other hand, there is a human cost of treating human affairs as if they were computations, and optimising them accordingly - making computations efficient typically makes them less flexible and easy to understand. In this talk, I shall highlight the importance and benefits of giving higher priority to the human aspects of computing in the pursuit of sustainable growth. In the process, I shall discuss and illustrate the guiding principle that has informed research into *Empirical Modelling* as an alternative conceptual framework for computing, viz: that the effective application of computers is not necessarily and exclusively concerned with the kind of abstraction from context that informs computational thinking, and that an essential contribution to human well-being and sustainable growth can be made by using the computer to support the *construals* that mediate our intelligence about the external world.

Invited Speaker

Title: Dr.
Name: Luigi
Surname: Pomante
Post held: Assistant Professor
Institution: Università degli Studi dell'Aquila – Center of Excellence DEWS
Postal address: Via Giovanni Gronchi 18, 67100 L'Aquila, ITALY
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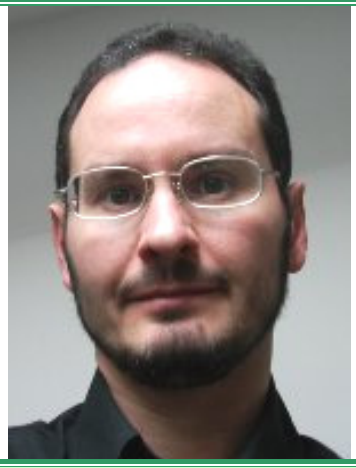
Tel: 00393475083582



Invited Speaker Profile

Luigi Pomante has received the *"Laurea" Degree in Computer Science Engineering* from the "Politecnico di Milano" (Milano, Italy) in 1998, the *M.S. Degree in Information Technology* from CEFRIEL (a center of excellence of the "Politecnico di Milano") in 1999, and the *Ph.D. Degree in Computer Science Engineering* from the "Politecnico di Milano" in 2001. He has been a Researcher at CEFRIEL from the 1999 to 2005 and, in the same period, he has been also a Temporary Professor at "Politecnico di Milano". From 2006, he is an Academic Researcher at DEWS (a Center of Excellence for the research of the "Università degli Studi dell'Aquila", Italy) and a consultant at WEST Aquila (a SME, spin-off of the same university). From 2008 he is also Assistant Professor at "Università degli Studi dell'Aquila" (*Embedded System* course). His activities focus mainly on *Electronic Design Automation*, *HW/SW Co-Design* and *Networked Embedded Systems* (in particular *Wireless Sensor Networks*). In such a context, he has been author (or co-author) of more than 50 articles published on international and national conference proceedings, journals and book chapters. He has been also reviewer and member of several TPCs related to its research topics. He is actually in charge of scientific and technical aspects of several DEWS European and National Research Projects.

Brief Summary of the presentation

Title of the presentation: Wireless Sensor Networks Applications to Support Sustainable Growth Services
Keywords: Wireless Sensor Networks, Resources Monitoring, Case studies
Workshop Session: Session 1. Enabling Tools and Technologies
Brief summary of the presentation: Today's availability of cheap, low power, and very small embedded processors, transceivers, sensors, and actuators, is leading to the use of wireless communications and computing for interacting with (i.e. monitoring and controlling) the physical world in various application domains. The resulting systems, called wireless sensor networks, combine the nature of networked systems with the energy constraints and physically coupled nature of embedded systems. The talk will briefly cover the fundamental issues about WSN and will describe several academic and industrial case studies related to WSN applications able to support sustainable growth services by allowing monitoring of resources and enabling preventive healthcare.

Invited Speaker

Title: Dr
Name: Elhadj
Surname: Benkhelifa
Post held: Lecturer
Institution: Staffordshire University
Postal address: Beaconside, ST18 0AD
Email: e.benkhelifa@staffs.ac.uk
Tel: +44 1785353279

Invited Speaker Profile

Dr Elhadj Benkhelifa is a research active Faculty member with a high entrepreneurial calibre. Elhadj's role spans across all Research Centres within the Faculty where he is actively contributing to the interdisciplinary R&D agenda and help establishing multidisciplinary research teams/projects. Elhadj is also He is also a Senior R&D advisor for a number of companies in the UK. With over 10 years of experience in research and leading projects, Elhadj has been actively involved in establishing the applied ICT research agenda within the Faculty in various application areas. Elhadj has attained a wealthy experience in running and managing high impact projects (£3.5M in 2008-2013). Elhadj is currently the Principal Investigator of a Government funded project- £650k- in the area of Cloud-based Services and eDiscovery. Elhadj has published extensively in refereed journals, books and international conferences and has been an invited speaker in a number of venues. Elhadj Serves in the Editorial Boards and a Reviewer of a number of renowned conferences and Journal. He is the Editor-In-Chief of the Int Journal of Artificial Intelligence has important experience in organising and chairing conferences/worshops. Elhadj is a Founder of IBScienific Publishing Group and currently heading a rapidly growing Research Group in Cloud Computing and Applications.

Brief Summary of the presentation

Title of the presentation: Cloud Computing, Big Data and the Internet of Things: The Crossroads for Sustainable Growth
Keywords: Cloud Computing, Big Data, Internet of Things, Data-Driven Economy.
Workshop Session: Session 1. Enabling Tools and Technologies for Sustainable Growth
Brief summary of the presentation:

Cloud Computing, Big Data and Internet of things are all emerging technologies, each one on its own holds some important opportunities for growth. This talk will shed lights on each of these concepts and technologies in the sustainable growth and discuss how leveraging the three technologies together can transform the current economy in disrupt the value chain.

Invited Speaker
Title: Dr.
Name: Ali
Surname: El Kharbotly
Post held: Biotechnology Consultant
Institution: Biotechnology Center, Ministry of Environment, Qatar
Postal address: P.O. Box. 200022, Doha, Qatar
Email: abkharbotly@moe.gov.qa
Tel: + 974 33411379

Invited speaker profile

The speaker has a Ph.D. in Agricultural and Environmental Sciences from Wageningen Agricultural University, the Netherlands. He worked in different countries as lecturer, biotechnology expert, senior agri-advisor and finally as biotechnology consultant in Qatar.
He has worked for almost 25 years in academic and applied research in the field of plant biotechnology, as a hands-on scientist in tissue culture, genetic transformation and classical and molecular breeding in potato and date palm. In the Middle East, as a biotechnology expert, he established several laboratories for molecular genetics and trained their staff in molecular analysis in plant and fish genomes. As a breeder and horticulturist he believes that the interaction between different disciplines and technologies is required to achieve food security in any country.

Brief summary of the presentation

Title of the presentation: Food security and safety in Qatar: challenges to be met
Keywords: Food security, food safety, biotechnology applications, Qatar
Workshop Session: ***Session 2.*** Resources scarcity challenges in the food sector

Although Qatar is one of the richest countries in the world, its food security is in critical condition. Qatar relies on other countries for its food supplies, even for the basic food requirements. This places the food security situation beyond the control of the country. The productivity of the agricultural sector is limited due to harsh environmental conditions, water scarcity, limited amounts of arable land, low acreage productivity and institutional constrains.

To overcome these obstacles, the government established the Qatar National Food Security Program (QNFSP) in 2008. The program develops solutions to ensure food security and safety by expanding activities of four main economical sectors (renewable energy, desalination and water management, agricultural production and food processing). It joins other institutions and organizations at regional and international level to develop research for best practices, solutions and optimal use of resources.

Utilizing cutting edge technologies (some biotechnology applications will be presented) separately and / or combined with the state of the art computing and logistic support, would produce a model that realizes a sustainable approach for food security and safety for dry land countries worldwide.

Invited Speaker

Title: ***Professor***
Name: ***Abdallah Omezzine***
Surname:
Post held: ***Vice Chancellor for Research and G.studies***
Institution: ***University of Nizwa***
Postal address: ***POB 33, PC 616, Nizwa, Oman***
Email: abdallah@unizwa.edu.om
Tel: +968 25446214 GSM +96899344395

Invited Speaker Profile

Have over 38 years of experience in Food economics and agribusiness-oriented activities including advanced graduate training in economics, research oriented toward developing and developed countries, teaching Food and agricultural economics, consultancy and field work in farm production and marketing, market development, extensive administrative experience in research and project management, Human resources management, academic, private and public agencies planning, consultancy in agricultural/fisheries business,
Main areas of research are food and agricultural marketing with focus on fruits and vegetables, and fisheries products, market development, price analysis, market organization, farm cooperation, , agricultural and fisheries business development, project analysis and evaluation. Have been involved in many national and international studies related to agricultural and fisheries commodity development.
Administrative duties included key advisory responsibilities, high management positions at state and private agencies, chairman and member of Boards, Head of Research and Training Centres, Project Team Leader.
Consulting activities involved work for various international agencies. Participated in various studies/projects in agribusiness and, agricultural and food market development, commodity market development, agricultural strategy development, collaboration in research proposals, project evaluation, agricultural policy implementation and planning.
Teaching has included graduate and undergraduate courses in marketing and prices, agricultural /fisheries policies, quantitative methods of economic analysis, economics of marketing institutions, management and firm organization, agricultural trade, food economics.

Brief Summary of the presentation

Title of the presentation: Land Tenure issues and food security
Keywords: Land tenure, Agricultural ecosystems, food security
Workshop Session: Session 2 - resources scarcity in the food sector
Brief summary of the presentation:

The multi-functional character of agriculture implies more consideration of the links with the ecosystems in which agricultural systems are addressing specific resources such as land. Agricultural Resources management in general will remain a core component of land policy. Land tenure security leads to higher investment and higher agricultural production. Land remains the main source of income and employment for a big proportion of populations in the world and consequently a strong mean of food security.

Land ownership, size and quality are potential determinants of rural income and state of poverty. Improved land ownership and distribution accompanied with modernizing agriculture has potential to reduce noticeably incidence of poverty and achieve food security objectives.

This presentation will address key issues of land tenure and their impact on rural poverty and food security. It will focus on the following issues:
1. Resources management and land tenure
2. Land degradation in relation to land tenure
3. Gender and Land Tenure
4. Structure of Agriculture
5. Land Tenure Policies and effects on Development, Poverty and Sustainability

Invited Speaker
Title: Mr
Name: Fernando
Surname: Centeno
Post held: CEO
Institution: Exergy Ltd
Postal address: The Technocentre, Puma Way, CV1 2TT Coventry (UK)
Email: fernandocenteno@exergy.uk.com
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Invited Speaker Profile

Fernando Centeno holds a degree in Physics, Masters Degree in Renewable Energies and Energy Efficiency, and is finishing his Ph.D. in Physics. Mr. Centeno has a wide experience in the engineering and consultancy fields related to the building construction & energy sector, such as renewable energy technologies and energy efficient programs for buildings, districts and industrial facilities. He has been working for many years in R&D projects at national and European level in the Energy and NMP areas. He has been a member of The Energy Efficiency Buildings (E2B) Association and the European Construction Technology Platform (ECTP). Mr. Centeno has been involved in the coordination of 2 FP7 projects focused on energy efficiency for industrial facilities and energy efficient buildings. As Head of the R&D Group, he has participated in more than 20 international R&D project proposals (i.e. FP7, IEE, Life+, Eco-innovation, Eureka, Eurostars, among others) and is currently in charge of managing more than 5 R&D projects in which the company is participating (FFW, INNOBITE…)

Brief Summary of the presentation

Title of the presentation: Challenges and opportunities in building energy efficiency enhancements
Keywords: energy demand, facility management, efficiency enhancements, ICT
Workshop Session: Session 3. Resources scarcity challenges in the energy sector
Brief summary of the presentation: The EU is falling behind its 20/20/20 target for the 20% increase in energy efficiency by 2020. Buildings are the leading segment in the EU energy demand, responsible for 40% of the overall consumption. Furthermore, as people spend 90% of their time in buildings, the increased building energy efficiency also translates to significant societal impacts. Measures to improve building energy efficiency include advanced energy management algorithms integrating weather predictive controls, building user/occupant interaction, and renewable on site thermal/electric energy generation and storage, innovative nano-material based insulation, and provision of quantification basis for implementation/evaluation of energy efficient technologies (EU projects: FFW, INNOBITE, R2CITIES, RESSEEPE). ICT applications within these measures are often referred to as “low hanging fruits” due to their favorable cost-benefit ratio. Such applications involve wireless sensing technologies and facility management enhancements that can reduce carbon emissions by up to 15%, energy consumption of residential buildings by almost 35%, commercial buildings by 17% and industry by 10%.

Invited Speaker

Title: Mr.
Name: Rafael
Surname: Abad
Post held: R&D Director
Institution: HABITEC Foundation
Postal address: C/Marie Curie 22, 29590 PTA Málaga, Spain
Email:rabad@cthabitec.com
Tel:0034952028125

Invited Speaker Profile

Telecommunication Engineering (Madrid Polytechnic University). More than 18 years of experience in the Telecom market, in activities of product design, development and manufacturing. From 1991 until 2008 the companies where the activity has been developed are the following ones: Telettra, Alcatel, ATlinks, Esmertec and Vitelcom. In these companies product development was done on mobile telephony market (private trunking cellular systems, residential cordless, GSM-GPRS-UMTS mobile phones and Java&USSD browsers for mobile phones). From 2009 onwards, in HABITEC it is held the R&D responsibility; projects related with innovations from Energy and ICT industry applied to Construction industry has been developed.

Brief Summary of the presentation

Title of the presentation: "Technology, Information and Communication services for engaging social housing residents in energy and water efficiency (EnergyTIC)".
Keywords: smart meter, water & energy consumption, information system, savings, behavior.
Workshop Session: Session 3 – Energy sector
Brief summary of the presentation:

The presentation will provide a summary of the systems implemented in EnergyTIC project. The projects target to put in production different information systems to allow dwelling tenants from social housing achieve savings. It will be analyzed the advantages of each one and will provide details on the GUI used to bring the information to final users.

Invited Speaker

Title: Bs, M.Sc., MBA, Civil Engineer
Name: Antonio
Surname: BARONA
Post held: Innovation & Business Director
Institution: Vertech Group
Postal address: 17 AV George V, Paris, 75008
Email: jabb@vertech-group.com

Invited Speaker Profile

Vertech is a French High-Tech company focused in the Construction and Environmental sector. Mr. Barona is the responsible of the overall R&D, Innovation & Business strategy of the company. He holds a Bs in Civil Engineering, M.Sc. on Materials and Innovation in the Construction sector, M.Sc. in Project Management and a MBA. Mr. Barona has more than 10 years of experience in the management, planning, execution and control of building and infrastructure construction together with the coordination of international research and development funded projects applied on sustainable solutions for buildings and industry. Former member of the Ad-Hoc Industrial Advisory Group of the European Commission for Energy Efficient Buildings (AIAG-EE) and member of several international academic, business and research platforms dealing with Environmental and Energy Technologies for a Sustainable Future. In term of international research cooperation, he has not only actively participated in more than a 100 project proposals but has led as project Coordinator of 2 FP7 projects (i.e. EE- QUARRY & S4EeB) focused on the construction aggregate sector, energy efficiency for industrial facilities and novel ICT solutions for energy efficient and sustainable buildings and its surroundings

Brief Summary of the presentation

Title of the presentation: International Cooperation Experiences in the Environmental Technology Sector
Keywords: Water treatment, community level, resource availability, solutions, quality, economic, environmental, social, factors, optimization, technologies, decision support tools, assess, monitoring, centralized, decentralized, systems.
Workshop Session: 4. Resources scarcity challenge in the water sector
Brief summary of the presentation:
The objective of this presentation will be to share our company's participation in a very challenging project in which we are currently take part of: *Smart, Cost-effective Solutions for Water Treatment and Monitoring in Small Communities in India. Decision Support System Integration.* This project will evaluate a range of different options for water treatment at community level in India taking into account resource availability, management, treatment solutions, water quality, and economic, environmental and social factors, to optimize them taking into account the local conditions and to develop novel technology tailored for their needs. Also, this Project explores the performance of a number of candidate technologies as well as assess contaminant monitoring techniques for both centralized and decentralized production systems. Technology potential will be demonstrated by applying the proposed technologies in two case regions with different climatic and social situations.

Invited Speaker
Title: Mr.
Name: Ruben van der Zwan
Surname: van der Zwan
Post held: CEO
Institution: Yenlo B.V.
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2394 AG Hazerswoude-Rijndijk, Netherlands
Email: ruben.van.der.zwan@yenlo.nl
Tel: +31718200082

Invited Speaker Profile

I started my ICT career in the early '90's. As a technical consultant I was focused on Oracle and Java technology. To do so I started a privately held company in Eastern Europe focused on developing logistic and warehouse management information systems. Later on I worked as a principle ICT solution advisor and account manager for a System Integrator in the Netherlands.
Since 2001 I'm focused on business ICT solutions and integration, based on service oriented architectures (SOA), enterprise servicebus (ESB) and related solutions like Governance, BAM and Identity & Access management.
In 2007 I started a new privately held company, Yenlo, with an international (EMEA) focus on delivering integration solutions with Oracle (Fusion) Middleware and Java open source (WSO2 / GlassFish).
Yenlo is Oracle Specialized Partner in the field of SOA Middleware and Oracle Exadata. Also Yenlo is specialized in Oracle APEX services. We developed our own APEX Framework for rapidly developing and deploying APEX information systems.
Since 2011 we are the EMEA partner for WSO2, the open source platform for integration solutions. We are experts in SOA, ESB, Governance, BAM and IAM.
Using our complete technology stack Yenlo delivers:

- Software development
- WSO2 and APEX Quickstart services
- 24/7 Managed Services
- 24/7 Private Cloud Hosting
- WSO2 product support within EMEA

Yenlo has got worldwide customers in logistics, healthcare, finance, trade and insurances. Please feel free to contact me at: info@yenlo.nl

Brief Summary of the presentation

Title of the presentation:"Licensing water extraction and discharge with SOA and BRE within the Dutch Local Government"
Keywords:Service Oriented Architecture (SOA, Business Rules Engine (BRE), Water management, WSO2 open source integration platform
Workshop Session: Session 4. Resources Scarcity Challenge in the water sector
Brief summary of the presentation: During this presentation I will present the business case and the technical solution how the Dutch Local Government manages the water quality, water extraction and water discharge based on a yearly changing law. The technical solution, based on the WSO2 platform, is focused on the Business Rule Engine. This presentation is relevant for (business) architects and (IT) manager who need a flexible and fast solution forever changing environments.

Invited Speaker
Title: Dr.
Name: Stefano
Surname: Tennina
Post held: Research Scientist
Institution: WEST Aquila s.r.l.
Postal address: Via Giovanni Gronchi 18, 67100, L'Aquila, Italy
Email: tennina@westaquila.com
Tel: +39 347 7929850

Invited Speaker Profile

Dr. Stefano Tennina received the Laurea degree (cum laude) in Electronic Engineering from the University of L'Aquila, Italy, in 2003 and the Ph.D. degree in Electrical and Information Engineering from the same Institution in 2007. From 2002 to 2009 he has been with the Centre of Excellence in Research DEWS as a post-doctoral researcher. From 2009 to 2012 he was a Research Scientist in the CISTER Research Unit, involved in two projects: EMMON (ARTEMIS program), aiming at large-scale and dense real-time WSNs and SENODS (PT-CMU program), targeting energy efficiency in large Data Centers. Since 2004 he is a co-founder of WEST Aquila s.r.l. where he holds now a position of Senior Researcher. His research focus is in the area of wireless communication protocols/systems, with particular emphasis on experimentation in real test-beds and applications. His current research activity is mainly focused on fully distributed positioning algorithms and source coding. He is author or co-author of more than 20 journal and conference papers in technical journals and conference proceedings.

Brief Summary of the presentation

Title of the presentation: Wireless Sensor Networks for Quality of Life: enabling technology for a healthy lifestyle
Keywords: WSN, pervasive healthcare
Workshop Session: Session 5 – The promotion of eco active and healthy life style
Brief summary of the presentation:
WSN4QoL (http://mail.mobi-health.eu/wsn4qol) is a "FP7 - People - Industry-Academia Partnerships and Pathways" project. WSN4QoL aims to achieve the long-term goal of designing and developing a more efficient pervasive healthcare system in the interest of the society by enhancing and promoting the industry academia cooperation, in particular in the area of advanced Wireless Sensor Network (WSN) technologies for pervasive healthcare applications. WSN4QoL aims at providing new cooperative protocols, Network Coding (NC) for multi-hop/cooperative diversity, and distributed localization algorithms are developed to meet the specific requirements of WSNs-enabled healthcare applications, and to overcome the limitations of existing services and products. The proposed solutions are developed by taking into account the specific requirements of pervasive healthcare e.g. energy-efficiency, low-latency, data reliability, context-awareness, and security. Furthermore, WSN4QoL aims at providing a proof-of-concept of the proposed solutions through the realization of experiments with real healthcare devices.

Workshop organizer
Title: Dr.
Name: Soha
Surname: Maad
Post held: Founder and Manager
Institution: IGROW EEIG – Integrated Technologies and Services For Sustainable Growth European Economic Interest Grouping
Postal address: Invent DCU, Glasnevin, Dublin 9, Ireland
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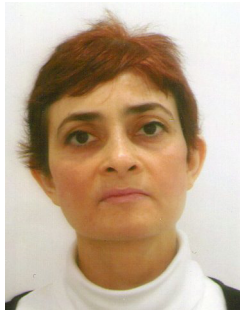

Speaker Profile

Soha Maad obtained her PhD from The University of Warwick in UK in 2002. She has a wide research experience in the application of Information and Communication Technologies (ICT) in various application domains. Her research experience gained during her PhD study at the University of Warwick in UK, her ERCIM fellowship at Fraunhofer Institute of Media Communication in Germany, her Post-doc at INRIA in France, her research fellowship at Trinity College Dublin, and her associate membership at Royal College of Surgeons in Ireland, aimed at developing enabling frameworks, tools and technologies to drive innovation across domain verticals including sustainable growth (water, energy, environment, eco life style), healthcare, e-government and governance, and other various business and social domains. Soha Maad was involved in various projects funded by the European Union, Science Foundation Ireland, the National Center for Scientific Research in France (CNRS), and the Federal Ministry of Education and Research (BMBF) in Germany. Various thematic fields were covered in these projects including innovation, governance, and enabling tools and technologies to drive innovation. These tools and technologies include e-infrastructures, universal accessibility, interactive television, augmented reality and digital image processing, distributed grid technology and high performance computing and the application of these tools and technologies to drive innovation across domain verticals. Soha Maad was also the coordinator/principal investigator of European Union and Science Foundation Ireland SFI proposals at Trinity College Dublin, the Royal College of Surgeons in Ireland, and University College Cork.

Brief Summary of the presentation

Title of the presentation: ICT for preventive healthcare and active and eco-life style
Keywords: healthcare, preventive, primary care, eco-life style, technology
Workshop Session: Session 5: ICT for the promotion of eco active and healthy life style
Brief summary of the presentation:
The presentation will give a brief overview of a Global Platform for Primary Care GP4PC that deploys various enabling tools and technologies. The platform is based on a concept for a long-term scalable bioengineering model of primary care. GP4PC serves the promotion of preventive healthcare and active and eco-life style.

ESGS13 INSTITUTIONS PROFILES OF INVITED SPEAKERS

No.	Institution	Country
1	Università degli Studi dell'Aquila – Center of Excellence DEWS	Italy
2	WEST Aquila s.r.l.	Italy
3	HABITEC	Spain
4	Yenlo B.V.	Netherlands
5	Exergy Ltd	United Kingdom
6	University of Nizwa	Oman
7	Synergetics nv	Belgium
8	Biotechnology Center, Ministry of Environment	Qatar
9	Office of Applied Research and Innovation, College of the North Atlantic-Qatar	Qatar
10	Qatar National Research Fund (QNRF)	Qatar
11	Staffordshire University	United Kingdom

Institution Profile

Institution Name: Università degli Studi dell'Aquila – Center of Excellence DEWS
Postal address: Via Giovanni Gronchi 18, 67100 L'Aquila, ITALY
Email: mariadomenica.dibenedetto@univaq.it (Director)
Tel: +39 0862 434449 (Director)

Brief Description of the institution

DEWS started its operations in 2001 after the Ministry of Scientific Research and University awarded grants for the formation of centers of excellence on a competitive basis. DEWS was among the very first organizations that proposed research on the use of networks of sensors, controllers and actuators to solve societal scale problems such as health, disaster recovery, transportation systems, and education. Its mission is still very up-to-date, demonstrated by the fact that the EU intends to focus the FP VIII on societal problems. DEWS promotes interdisciplinary cooperation among researchers to achieve its research objectives. In particular, DEWS researchers are active in networked embedded systems automatic control, analog and digital electronics, computer science and telecommunications. DEWS has established strong research collaborations with some of the most prestigious universities in the world such as University of California at Berkeley, and Institute of Technology (KTH). DEWS has an ongoing collaboration with multinational companies such as Selex Communications (Chieti, Florence, Genoa, Pomezia), Thales Communications (Chieti). In this context, the Centre has been able to plan and manage projects of significant complexity as well as to spin-off an engineering company (WEST AQUILA http://www.westaquila.com/).

Brief description of key members and activities

DEWS is participating (no coordination) in several European projects, in particular:

- ***VISION*** (ERC Staring Grant): Video-oriented UWB-based Intelligent Ubiquitous Sensing) will develop an innovative infrastructure aiming at strengthening future wireless sensor networks (WSN) with the capability of supporting intelligent services for ubiquitous sensing
- ***PRESTO*** (Artemis 2010): it aims at improving test-based embedded systems development and validation, while considering the constraints of industrial development processes
- ***CRAFTERS*** (Artemis 2011): the project brings to bear a holistically designed ecosystem from application to silicon targeting many-core embedded systems and FPGA platforms
- DEWS is a member of the **Network of Excellence HYCON2** (Highly-complex and networked control systems). The aim of these Networks of Excellence is to assemble a community of high-profile researchers involved in the broad area of hybrid system analysis and design

Institution Profile

Institution Name: WEST Aquila s.r.l.
Postal address: Via Giovanni Gronchi 18, 67100, L'Aquila, Italy
Email: info@westaquila.com
Tel:--

Brief Description of the institution

WEST Aquila (Wireless Embedded Systems Technologies, L'Aquila) is a high-technology company founded in December 2004, whose main activities lie in the area of Research, Design and Prototyping of products and services for the industry, with particular attention to Wireless Networked Embedded Systems, notably Wireless Sensors Networks (WSNs). The background of the company relies upon system design methodologies, wireless communication systems, heterogeneous distributed networks, and testbed implementations. Internet URL: http://www.westaquila.com

Brief description of key members and activities

The research and technical background of the company rely upon system design methodologies, hybrid control schemes and fault-tolerant safety critical embedded systems, wireless networks to a large extent, and more recently focus on heterogeneous distributed networks. This expertise has been developed, assembled and finalized in 9 years of activities developed by the nine co-founder research-scientists of WEST Aquila (5 professors at University of L'Aquila and 4 Post Docs at the same institution), who have brought into the company their significant experience gained through participations to European funded projects within the 6th and 7th EU Framework Programs, and through long-lasting R&D collaborations with many companies, e.g., Thales Communications, Magneti-Marelli, Synopsys, Selex Communications, Accent S.p.a, PARADES, and top university partnership, e.g., University of California at Berkeley, and Royal Institute of Technology (KTH) at Stockholm. The main expertise of WEST Aquila lies in the development of innovative solutions and technologies for networked embedded systems. Notably, WEST Aquila has relevant R&D background in the design of WSNs, which encompasses: (*i*) the development of novel design methodologies, (*ii*) the design and optimization of novel algorithms and protocols, (*iii*) the experimentation onto commercial available platforms, and (*iv*) the exploitation of these high-tech solutions into business and market opportunities. On the EU-level, co-founders of WEST have played leading roles in FP5-IST-COLUMBUS and FP6-HYCON NoE. Currently, they play major roles in the. WEST is currently participating in several EU projects, including the FP7-HYCON2 Network of Excellence, Greenet (an Initial Training Network (ITN) Marie Curie project that is focused on the analysis, design, and optimization of energy efficient wireless communication systems and networks, www.fp7-greenet.eu) and WSN4QoL (Wireless Sensor Networks for Quality of Life, "FP7 - People - Industry-Academia Partnerships and Pathways", http://mail.mobi-health.eu/wsn4qol).

Institution Profile

Institution Name:HABITEC
Postal address: C/Marie Curie 22, P.T.A., 29590 Malaga, Spain.
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Tel:+34952028125

Brief description of the institution

Please select type of institution (a Triple Helix entity):

☐ Higher Education Institution ☐ Public entity ☑ Company / Industry

HABITEC is a non-profit private foundation, qualified as Technological Centre by the Andalusia Administration. The activities develop are included inside the R&D projects and services: consultancy (energy, environment, building, urbanism, civil works), learning, and congress/networking.

The R&D projects bring solutions to Energy, ICT and Construction problems.

The Board of Directors is companies in the fields of Energy, ICT and Construction. Those companies are involved in the preparation and execution of projects. This is a way to get real scenarios were testing the innovations designed in the R&D projects.

Brief description of key members and activities

Key member detailed description can be obtained from http://www.cthabitec.com/equipo.

Activities:

- R&D projects (Energy, ICT and Construction),
- consultancy (energy, environment, building, urbanism, civil works),
- learning,
- congress/networking.

Institution Profile

Institution Name: Yenlo B.V.
Postal address:
Rijndijk 137
2394 AG Hazerswoude-Rijndijk
Netherlands
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Tel: +31 71 82 000 82

Brief description of the institution

Please select type of institution (a Triple Helix entity):

☐ Higher Education Institution ☐ Public entity ☑ **Company / Industry**

Rapid changes in laws and regulations, open-market models, globalization, competition, influences of social media, 'more-for-less' cost reduction goals, are all challenges for contemporary organizations. To stay ahead of competition IT processes and resources should be used perfectly, fast and flexible to guarantee agility of the organization. Yenlo is the specialists in Software Development, Managed Services and Private Cloud Hosting solutions to provide your organization the agility through integration (SOA, BPEL and ESB) solutions and cost reductions.

Yenlo is the EMEA partner of WSO2, the open source platform which delivers fast and flexible solutions for integration solutions.

Within West-Europe:

#1 Software Integration Specialist with open source platforms

#1 24/7 Managed Services Experts in Oracle and Java domain

#1 WSO2 partner for full production support & implementation

Brief description of key members and activities

CEO and founder of Yenlo, Ruben van der Zwan, will present during this event an integration innovation project executed by the combined Dutch water management Companies. This project, called 'Click, Choose and Ready!' is an example how traditional water management companies can benefit from the professional integration and SOA solutions. Due to the open source platform WSO2 it now is possible for farmers, government, civilians, and others people to authorize water deduction water losing and water quality assurance. Join!

Institution Profile
Institution Name: Exergy Ltd
Postal address: Puma Way. CV1 2TT. Coventry (UK)
Email: info@exergy.uk.com
Tel: +44 (0)2476236151

Brief description of the institution

Please select type of institution (a Triple Helix entity):

☐ Higher Education Institution ☐ Public entity ☑ Company / Industry

Exergy is a UK-wide engineering and consultancy, providing high quality services to the energy value chain, and offering expertise in every aspect of energy efficiency and associated environmental issues. The company was set up as a private foundation with the aim of offering technology-based, innovation services to both companies and public institutions. EXERGY's areas of activity are: ENERGY EFFICIENCY: For energy efficiency projects in transportation, construction and industry sectors, our expertise and capabilities extend across the full range of energy sources and technologies: Energy Management & Optimizations, Energy Performance Assessments for solar PV and LED Lighting systems, Energy auditing. RENEWABLE ENERGIES: In the renewable energy sector EXERGY has broad experience across a range of technologies including: PV solar, thermal solar, bio fuels, bio energy, geothermal energy and Energy from waste. ENVIRONMENTAL CONSULTANCY: EXERGY has a multi-disciplinary team supported by extensive practical experience in the following specialist areas: Feasibility Assessments, Resource Efficiency & Environmental Management, water management strategies, design and delivery of resource efficiency support for SME's, development, monitoring and measurement of sustainability projects, Low Carbon footprint Construction Techniques and Life Cycle Assessment.

Brief description of key members and activities

Fernando Centeno holds a degree in Physics, Masters Degree in Renewable Energies and Energy Efficiency, and is finishing his Ph.D. in Physics. Mr. Centeno has wide experience in the engineering and consultancy fields related to the construction & energy sector, such as renewable energy technologies and energy efficient programs for buildings, districts and industrial facilities. .Mr. Centeno has been involved in the coordination of two FP7 projects focused on the energy efficiency for industrial facilities and energy efficient buildings. As Head of the R&D Group, he has participated in more than twenty international R&D project proposals and now he is in charge of managing more than five R&D projects in which the company is participating.

Dr Vladimir Vukovic has over ten years R&D experience in various applications of modelling, simulation and optimization tools. Over the past three years he was also lecturing a Systems and simulation course at the University of Applied Science Technikum Wien, and worked as an external consultant for Smart Metering Systems within the UNDP project on Removal of Barriers for Energy Efficiency in Croatia. So far he has participated as a technical contact point in over a dozen EU FP7 and EUREKA proposals in ICT and Energy fields. His work has been awarded by the Austrian Institute of Technology, American Society of Heating, Refrigeration and Air-conditioning Engineers (ASHRAE), Air and Waste Management Association (A&WMA) and The Pennsylvania State University.

Institution Profile

Institution Name: University of Nizwa
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Email: Abdallah@unizwa.edu.om
Tel:+968 25446214

Brief description of the institution

Please select type of institution (a Triple Helix entity):

☑ Higher Education Institution ☐ Public entity ☐ Company / Industry

The University of Nizwa was created in year 2004 in response to the directives of His Majesty Sultan Qaboos Bin Said who called for a more active role of the private sector in contributing to higher education in Oman.

The University of Nizwa is a non-profit institution, which is governed by its faculty. It promotes positive thinking and preserves the nation's cultural heritage and identity. Its purpose is to broadly educate students and equip them with the knowledge and life skills needed to enrich their lives and enable them to meaningfully contribute to the progress of society. The education of students is its first priority. The University strives to enhance literacy, innumeracy and skills of communication, critical thinking and problem solving. It also recognizes research as central to its long-term viability and success. The University of Nizwa interacts with the local, national and international communities and integrates its educational and research programs with this mission. Faculty is actively engaged in community extension services. It has developed relationships with many external universities and research centers.

The University of Nizwa has a unique aspect of differentiation from many other higher education institutions in Oman consisting of the establishment of an Investment Fund which has the capacity to own and manage companies that provide services needed on campus and elsewhere. The Investment Fund is contributing to the enhancement, growth and sustainability of the University.

There are four active colleges, Pharmacy and Nursing, Arts and Science, Economics, management and Information Systems and Engineering providing 32 undergraduate programs and 6 graduate programs at the master level.

After 9 years of operation the University of Nizwa has accomplished a great deal of success testified by a high number of student enrollment, an emerging research agenda reflecting a strong link with the community, high quality leadership at all management levels and a good public recognition that put the university on the track of reputation. This success is also demonstrated through graduates' employment and employers' satisfaction.

Brief description of key members and activities

Prof. Ahmed Bin Khalfan Al Rawahi	Chancellor
Prof. Abdul-Aziz Al Kindi	Vice Chancellor For Academic Affaires
Prof. Abdallah Omezzine	Vice Chancellor for Graduate Studies & Research
Mr. Saoud Al Jufaily	Vice Chancellor for Administrative and Financial Affaires

Institution Profile	
Institution Name: Synergetics nv *Postal address: Terlinckstraat 75, 2600 Antwerp, Belgium* *Email: info@synergetics.be* *Tel: +32478642346*	SYNERGETICS PERSONAL DATA AS AN ECONOMIC ASSET

Brief description of the institution

Please select type of institution (a Triple Helix entity):
☐ Higher Education Institution ☐ Public entity ☑ Company / Industry

Synergetics is an Antwerp, Belgium based innovation company involved in ***Personal Data Ecosystems***, which are introducing the individual (citizen, patient, worker, consumer) as a genuine stakeholder in his own processes. In fact, 500 years after the Renaissance, where the individual was 're-discovered', the world seems finally ready to accept the individual as ***the ethical integration point of his own data***. This requires personal (cloud) infrastructure allowing for Personal Life Management, which notably in Europe is underway of becoming a game-changing factor.

Current application domains are regional & sectorial health, human capital and consumer ecosystems, in which privacy is shifting from the semi-patronizing 'protecting personal data' into the citizens empowerment towards 'trusted sharing' of personal data.

To help advance this fundamental European societal change, Synergetics nv :

- Is a core member of the World Economic Forum's "Rethinking Personal Data" project. (http://www.weforum.org/issues/rethinking-personal-data)
- Initiated several FP6 and FP7 IP projects such as prolix.eu and tas3.eu
- Further enhances the core *end2end trust assurance* of such ecosystems by engaging into additional research projects such as http://www.suplight-eu.org/ and the Artemis JTC programme for embedded systems.

Current commercial activities involve personal data ecosystems in the high-tech city-region of Eindhoven (NL), such as a ***health ecosystem*** for 21 communes, a ***human capital ecosystem*** for the Brainport region and a ***sectorial human capital ecosystem*** for the Dutch automotive industry.

Brief description of key members and activities

Luk Vervenne is an Internet entrepreneur and founder and CEO of Synergetics.

Luk is co-founder of Netvision NV (1994, later Ubizen, now Cybertrust) and BelSign/Globalsign, Europe's first digital certificate authority (1996). He comes from the ICT and business publishing world, where he was an editor and an editor-in-chief of several business and industry-related magazines from 1988 till 1994. Luk was also the business development manager of the ontology research STARlab of the Free University of Brussels, and is successful in creating synergies between business and academia, resulting in pragmatic technological innovations. He acted as a board member of the International HR-XML Consortium, the Global European e-learning Industry Group and the European Institute for e-learning.

As a competency-driven innovator, Luk has set up a network of world class experts, making Synergetics an industry thought leader in the field of human factor empowerment. He has a long experience in managing in initiating and complex ICT projects, including Leonardo, FP5, FP6 and FP7 IP projects.

Sampo Kellomäki is the chief architect of TAS³ (Trusted Architecture for Securely Shareable Services with Privacy - www.tas3.eu), a FP7 funded IP project that will be leveraged by this present proposal. He is also the lead developer of ZXID.org open source project that is the reference implementation of TAS3 core security architecture. He has been on the forefront of identity management and federation technologies for the last 10 years, acting as the architect of Symlabs' directory and federation products, participating from start in Liberty Alliance, SAML, and XACML standardization.

Sampo authored several Liberty Alliance specifications, in editor capacity. He is a frequent speaker or panellists in IdM related industry events. Sampo holds an MSc/CS degree from Helsinki University of Technology. Sampo is currently working with Synergetics on the exploitation of TAS³

Dr. Gang Zhao earned his degrees of MSc and PhD in computer science at the University of Manchester Institute of Science and Technology, UK. He has been mostly involved in R&D of intelligent system development since 1990. He has been a system programmer, analyst, architect for the system development as machine translation, natural language understanding, speech recognition, information extraction, data and text mining, case tools for database modelling, dialogue systems, rule-based inference engines, human resource management system, patient record management system. He has acted as technology lead and project manager in both industrial and academic institutions for product development as well as research programs such as IST projects from the 5th - 7th framework programs.

He has taught on distributed system development at the Department of Math and Computing the Open University, UK and worked as senior researcher at STARLab, Department of Computer Science, Vrije Universiteit Brussel, Belgium. He has researched and published on computational linguistics, knowledge systems, ontology development and applications. He is consulting to private and public institutions in Belgium on competence-based job portals, information extraction, text mining and ontology-based information management in product development and European research programs. He now works with Synergetics on semantic based matching for reference frameworks.

Johannes Helander has worked on operating systems and real-time systems for over 20 years, including contributing to Project Mach, creating the first free Unix server running on Mach, the first Microsoft Interactive TV system firmware, 3G graphics accelerator, TCP direct path (beating the TCP land speed record) for Windows, smart watch software, started .net compact framework, created the first embedded web services stack, demonstrated the world's smallest XML web services, implemented a prototype Trusted Azure secure protocols used to confidentially sequence DNA, developed a touch based device configuration protocol, created the WS-Management Embedded Toolkit, served on the premier real-time conference program committees (RTSS, RTAS), participated in launching the cyber-physical computing initiative and served on a major project evaluation panel with the NSF, wrote a large Artemis project proposal (approved but not appropriated), published over 30 peer reviewed publications, filed over 20 patents, worked as a Researcher at Microsoft Research in Seattle and later Chief Architect at the Microsoft Research lab in Germany.

Institution Profile

Institution Name: Biotechnology Center, Ministry of Environment
Postal address: P.O. box: 200022, Doha, Qatar.
Email: biotech@moe.gov.qa
Tel:+ 974 4426 1216

Brief description of the institution

Please select type of institution (a Triple Helix entity):

☐ Higher Education Institution ☑ Public entity ☐ Company / Industry

The State of Qatar, represented by the Ministry of Environment established the Biotechnology Center as a part of its fourth administrative unit for Agricultural affair. The Biotechnology Center aims at the exploitation of biotechnology applications in environmental and agricultural sectors through applied research projects. The center contains three departments: plant tissue culture, genetic engineering and genetic resources. It carries two national projects, one in the production of disease free date palm plantlets and the other in establishment of the national gene bank. The center is involved in a few research projects in the field of genetics, genomics, metagenomics and cell biology. It uses and develops biotechnological approaches to address national needs in the environmental and agricultural sectors through the use of best practices in accordance with international standards. It cooperates with local and regional institutions and contributes to community education.

Brief description of key members and activities

Mr. Mohammed S. Al-Mohannadi; Director, Dr. Ali El Kharbotly; Biotechnology Consultant, Mrs. Kamla I. Al-Romaihi; head of Tissue Culture Dept. Mrs. Salwa D. Al-Kuwari; Head of Genetic Resources Dept., Ms. Mona A. Al-Bloushi; Head of Genetic Engineering Dept., Ms. Mariam M. Al-Doseri; Head of Technical Office.

Plant tissue culture protocols are being developed for different crops as well as wild plants to promote their mass production at the tissue culture department. Its major activity is the national project of date palm propagation.

The genetic resources department is focusing on the collection, characterization, identification, conservation and registration of plant, animal, marine and microbial genetic resources.

Molecular identification based on a DNA barcode is one of the major activities of the genetic engineering department for genetic resources characterization. Molecular techniques are also used in the field of fisheries and crop improvement.
The center is starting a few strategic projects funded by the ministry or by the Qatar foundation covering various areas. A project is being developed on assays for quality control of the food production system to ensure safety of workers and consumers.

Institution Profile

Institution Name: Office of Applied Research and Innovation, College of the North Atlantic-Qatar
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Tel:974-4495-2236

Brief description of the institution

Please select type of institution (a Triple Helix entity):

☑ Higher Education Institution ☐ Public entity ☐ Company / Industry

College of the North Atlantic – Qatar (CNA-Q) is Qatar's premier technical and vocational college. CNA-Q is playing an instrumental role in the development of Qatari technical capabilities and skills as defined by Qatar's National Development Strategy. With world-class premises and facilities, a forward-looking leadership, internationally experienced instructional faculty, and a highly supportive business community, CNA-Q has become a college of choice for Qataris wishing to pursue a technical education in their own country.
In 2012-2013, CNA-Q is celebrating ten years of offering the most comprehensive technical education in the State of Qatar. With over 30 programs, CNA-Q has more than met its mission to provide the State with a skilled technical workforce and the industry leaders of tomorrow.
Incorporating the very best of Canadian technical education, our programs are built on meeting the demand for a competent workforce. Providing training in a range of technical areas including Health Sciences, Engineering Technology, Business Studies, and Information Technology, College of the North Atlantic – Qatar is helping to provide the educational base for the future of the State of Qatar.
CNA-Q's campus consists of 21 buildings housing features state of the art scientific laboratories, computer systems, and industrial workshops. Each program area has dedicated buildings to accommodate their own specialty shops, labs and equipment. Input from industry and business advisory committees ensures design and delivery of appropriate training.

Brief description of key members and activities

- Professor Firouz Darroudi (Researcher) – Head of CNAQ's Radiation Genetics and Environmental/Chemical Mutagenesis Laboratory
- Susan Madzia and Jennifer Strickland – Antimicrobial Properties of Desert Plants
- Allan Stirling – Environmental Health, Food Safety and Qatar Food Security Taskforce
- Jennifer Strickland – Air Quality Monitoring (AQM) and lead on CNAQ's AQM Station

Institution Profile

Institution Name : Qatar National Research Fund

Postal address: PO Box: 5825 Doha – Qatar

Brief description of the institution

QNRF was formed in 2006 by Qatar Foundation for Education, Science and Community Development (QF). It is the national funding agency facilitating original, competitively-selected research projects that address the national priorities needs of Qatar by managing funded research programs and major research initiatives in Qatar. Its purpose is to serve as a primary building block in the creation of a domestic research culture, as well as a key force in generating knowledge. Her Highness Sheikha Moza bint Nasser, in her capacity as Chairperson of QNRF, describes the organization's mission: "QNRF will provide the information to enable Qatar to make effective decisions and maintain its path toward a sustainable economy and a dynamic society."

QF aims to support Qatar on its journey from a carbon-based to knowledge-based economy by unlocking human potential. QF views research as essential to national and regional growth, as the means to diversify the nation's economy, enhance educational offerings and develop areas that affect the community, such as health and environment. QNRF is a centre within the Research and Development establishment at QF.

Brief description of key members and activities

QNRF and its activities help fulfil Qatar National Vision 2030's call for Qatar to be an 'active centre in the fields of scientific research and intellectual activity.' Since 2006, QNRF has been building Qatar's research capacity by creating a research culture, building human capital in research, establishing research infrastructure, raising international visibility and publishing the works of researchers. QNRF provides opportunities for researchers at all levels, from students to professionals, in the public and private sectors, as well as academia.

Qatar marked a new milestone in its research development in 2012, with the launch of the Qatar National Research Strategy (QNRS). The QNRS vision is that 'Qatar will be an international centre for research and development excellence and innovation'. In line with the national strategy, QNRF continues to advance knowledge and education by supporting original, competitively-selected research in all fields of sciences with emphasis on the following four pillars:

- Energy and environment
- Computer sciences and ICT
- Health
- Social sciences, arts and humanities

QNRF's funding Programs

QNRF launched the first of its portfolio of funding Programs, the **Undergraduate Research Experience Program (UREP)**, in the year of its inception. Over the past six years, UREP has provided more than 2,000 undergraduate students in Qatar with the opportunity to gain significant experience in team-based research collaboration with faculty, postdoctoral fellows, graduate students, and other undergraduates or research staff. The program promotes 'learning by doing' and 'hands on' mentorship activities as effective methods for undergraduate research education. UREP supports young women in Qatar, in particular to develop their skills in science and research. Thirteen UREP cycles have been concluded since October 2006, during which the Program has received more than 1,250 research proposals, with around 650 of them receiving grants from QNRF valued at a total of around $20 million.

In 2007, QNRF launched its flagship funding Program - the **National Priorities Research Program (NPRP)**. This is a much larger, more expansive Program that encourages research participation from around the world. Each project can be funded to a maximum of $350,000 a year, for up to three years. Over the past five cycles, the Program has attracted some of the world's most renowned scientists and funded 567 original and competitively-selected research projects at an investment of over $485million, making it QNRF's largest funding activity. Twenty-nine Qatari research institutions have collaborated on the research projects with 323 international institutions from 48 countries across the globe, helping to advance scientific innovation nationally and strengthen Qatar's position within the global academic community.

In an effort to support young postdoctoral researchers in the early stages of their careers, QNRF launched the **Junior Scientists Research Experience Program (JSREP)** in 2010. Directed at researchers aged 40 or younger, who work in Qatar, they can compete for a grant of up to $100,000 a year, for a maximum of three years, to carry out research projects and lead their own team. Proposals are invited twice a year and, since May 2010, QNRF has implemented three JSREP cycles in which a total of 54 research proposals have been submitted.

Promoting learning-by-doing and a hands-on approach, QNRF also launched its **Secondary School Research Experience Program (SSREP)** in 2010. Aimed at weaving a research culture into the country's educational fabric as early as the secondary school level, it is designed to enhance productive collaboration between teachers and pupils, while facilitating awareness of research for Qatari and non-Qatari school students. QNRF has received a total of 273 research proposals from 33 schools across the country since it was first launched.

In addition to the funding Programs, QNRF pursues other activities. The Qatar National Research Survey, designed and maintained by QNRF, is a publicly accessible repository containing almost 9,000 records, in both Arabic and English, of all research activities being carried out in the country. The Conference and Workshop Sponsorship Program encourages the exchange of ideas and information about opportunities for research in Qatar, connecting participants globally to their peers.

To continue on this journey of Qatar's transition into a knowledge-based society, QNRF is developing an innovative "Research Outcome Centre (ROC)" to disseminate the outcomes of its funded research to the community locally and internationally. QNRF is also in discussion with the management at QF's Research and Development establishment to launch new initiatives for research funding and training in Qatar.

Institution Profile
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Brief description of the institution

Staffordshire University has a long and proud history of providing high quality, progressive and inclusive higher education for people from across Staffordshire, the region, the UK and the rest of the world. The University has a proven track record for achieving excellence in teaching quality, developing innovative courses and for providing opportunities to study in challenging and exciting ways in the areas of digital media, science and technology, environment/sustainability, Engineering, business performance and professions and health and well being. In addition to our core educational activity, the University is committed to transferring knowledge to private, public and voluntary sector partners, through our applied research and innovation activity. The University has undertaken collaborative projects with partners in almost every EU member state as part of the commitment to building on and extending European partnerships to support our applied research and innovation. Staffordshire University has four Faculties: Faculty of Arts and Creative Technologies; Faculty of Business, Education and Law; Faculty of Computing, Engineering and Sciences; Faculty of Health Sciences

Brief description of key members and activities

Through a number of highly specialised Applied Research Centres (ARCs), Staffordshire University provides an enviable range of multi-disciplinary skills and research capabilities to assist public and private sector bodies in breaking new ground, developing new processes, and securing highly viable new opportunities.

1. Centre for Energy Efficient Systems (CEES)
2. Mobile Fusion Centre (MFC)
3. Centre for Information, Intelligence and Security Systems (CIISS)
4. Centre for Applied Business Research
5. Centre for Media, Arts and Technology
6. Institute for Applied Creative Thinking
7. Centre for Ageing and Mental Health
8. Centre for Health Psychology
9. Institute for Education Policy Research

Staffordshire University has a number of overseas Campuses in China, India, Malaysia, and Middle East.

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or call +353851601815

For comments, queries, or suggestions please email manager@igrow-eeig.eu

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