

Integration of European Simulation Chambers for Investigating Atmospheric Processes

Request for Associated Partnership

EUROCHAMP-2020 – The European Distributed Infrastructure for Experimental Atmospheric Simulation A proposal to the Call H2020 INFRAIA-01-2016/2017: Integrating Activities for Advanced Communities http://www.eurochamp.org



# TSI GmbH

Optische und elektronische Messtechnik für Forschung und Industrie

Neuköllner Strasse 4 52068 Aachen Deutschland Telefon (0241) 52303-0 Telefax (0241) 52303-49 Web www.tsi.com

TSI GmbH Neuköllner Str. 4 52068 Aachen Germany

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

#### EUROCHAMP-2020 Associated Partnership

Aachen, 15th of March 2016

Dear Prof Doussin.

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

TSI is a leader in the field of Aerosol Technology, dedicated to manufacturing applicationspecific instruments for more than 50 years. We have partnered with research institutions worldwide to develop over 200 precision instruments. This cooperation resulted in more than 25 technology licenses and 50 patents spanning scientific to industrial manufacturing applications. We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test our new Fast Scanning 1nm-SMPS designed to measure particle size distributions down to 1 nm at the chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours

TSI Gmbh Neuköllner Str. 4 152068 Aachern & Telefon 0241/52303-0 Sincerely, -

Dr.-Ing. Thomas Krinke Sales Manager Particle Instruments - Europe, Middle East & Africa

E-Mail: TSIGmbH@tsi.com Webseite: http://www.tsiinc.de

Deutsche Bank, Aachen BLZ 390 700 20 Konto-Nr 1777770 IBAN: DE66 3907 0020 0177 7770 00 SWIFT: DEUTDEDK390 USt-IdNr. DE123594834

Geschäftsführen Günter Höing Thomas E. Kennedy Amtseericht Aachen HRB 3193



# EUROCHAMP 2020 Partnership

Dear Prof Doussin,

We are pleased to accept your invitation to join EUROCHAMP 2020 as an Associate Partner.

Tofwerk (<u>www.tofwerk.com</u>) is the leading supplier for time-of-flight mass spectrometers to the atmospheric science market. Tofwerk thus has a high interest in the ongoing research and would clearly benefit from the exchange of knowledge and expertise within the EUROCHAMP 2020 community.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are pleased to be an Associated Partner of EUROCHAMP 2020 and fully support you H2020 application for funding this valuable infrastructure.

Katrin Fuhrer

K-Galares

CFO Tofwerk AG



 TehnoINSTRUMENT IMPEX SRL

 ♠ Str. Laboratorului 31B, Ploiești 100301, RO

 ☎ +40 344 401 401
 ● +40 244 435 252

 ● tehnoinstrument.ro

Professor Jean-FrancoisDoussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 CréteilCedex France

Registration no. 62944E/03.03.2016

Dear Prof Doussin,

## **EUROCHAMP-2020** Associated Partnership

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

TehnoINSTRUMENT IMPEX SRL is a leader in the field of providing process control instrumentation and environmental monitoring systems. We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test our environmental monitoring systems at the chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours sincerely,

Robertino Caravia Managing Director

Informațiile cuprinse în prezentul document sunt confidențiale și nu vor fi puse la dispoziția unui terț fără acordul scris al TehnoINSTRUMENT IMPEX

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France



24/02/2016

Dear Prof Doussin,

#### EUROCHAMP-2020 Associated Partnership

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Company RAMEM, under IONER (<u>http://ioner.eu/</u>), its trademark for Aerosol and Nanoparticle instrumentation is a leader in development of analysis techniques and instruments for Aerosol research, especially in for the smaller range of Nanoparticles, the nucleation stage We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test our High Resolution Differential Mobility Analyser specially designed to study the nucleation process at the chamber facilities. The success of the instrument demonstrated in the chamber facilities will be of the utmost importance in the launch of the instrument to the market as European technology.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours sincer	ely		
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Emilio Ramiro Arcas CEO

QUMA Elektronik & Analytik GmbH Preussenstr.11-13 D 42389 Wuppertal / Germany Fon +49/202/747 9495 0 Fax +49/202/747 9495 40 info@quma.com

GUMA Elektronik & Analytik GmbH, Preussenatr. 11-13, D 42389 Wuppertar

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

> Datum 09.03.2016

#### EUROCHAMP-2020 Associated Partnership

Dear Professor Doussin,

QUMA Elektronik & Analytik GmbH is very pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

In addition to various analytical instrumentation, QUMA provides novel instruments based on the LOPAP® technique for the ultra-sensitive, interference free detection of reactive nitrogen species in the atmosphere.

Our company would clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test, calibrate and inter-compare our instruments at the chamber facilities.

We are also convinced that being an Associated Partner of EUROCHAMP-2020 will support innovative product development as well as the improvement of our current instruments.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry in general.

I wish you every success in your application and I eagerly anticipate a positive outcome and the opportunity to become an associated partner in this valuable infrastructure.

Yours sincerely,

Uwe Matschulat,

Chief Executive Officer

Geschäftsführer: Klaus Quedrau, Ennepetal Uwe Matschulat, Wuppertal

Amisgericht Wuppertal HRB 7353 Gerichtsstand Wuppertal Finanzamt/ tax number VAT Nr. DE 121 015 365 St.Nr.: 131/5927/0366 Deutsche Bank Konto Nr.: 316 6030 BLZ 330 700 24 IBAN DE98 3307 0024 0316 6030 00 BIC (SWIFT-Code): DEUTDEDBWUP http://guma.com



<u>www.pm10-ambiente.it</u> pm\_tensrl@pec.pm10-ambiente.it Tel +390103536425 Fax +390103536354

Genova, February 23, 2016

To the kind attention of Prof. Paolo Prati I.N.F.N. Sezione di Genova Via Dodecaneso 33 16146 Genova IT

Subject: EUROCHAMP-2020 Associated Partnership - Letter of acceptance

Dear Prof. Prati,

with its well-equipped network of atmospheric simulation chamber facilities, the EUROCHAMP Consortium represents a very interesting possibility for the R&D activities of our Company. In particular, we see the chance to collaborate for the development and validation of instruments/methods for the measurement of the optical properties of the particulate matter.

Therefore our Company accepts to become an "associated partner" of the EUROCHAMP-2020 Consortium.

> Dr. Dario Massabò (CEO at PM\_TEN s.r.l.)



Romain Lacombe Plume Labs, President 38 rue Dunois, 75646 Paris cedex 13, France <u>romain.lacombe@plumelabs.com</u> | +33 6 50 16 14 37

Paris, March 5, 2016

# Subject: Acceptance of EUROCHAMP-2020 Associated Partnership

**Attention: Professor Jean-Francois Doussin** EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex, France

Dear Prof. Doussin,

We are very pleased to accept your kind invitation to join EUROCHAMP-2020 as an Associated Partner.

Plume Labs is striving to become a world leader in the field of personal and distributed sensing of air pollution exposure, and is committed to open innovation as a lever for accelerated technological development as well as to better serve its target markets.

We have for instance benefited from innovation funding from the European Commission through ODINE (Open Data Incubator in Europe), a Europe-wide distributed acceleration program funded by Horizon 2020, to develop a data platform for live air pollution levels based on open data shared by governments and scientific or environmental authorities on the Continent and around the world.

The potential of our technologies as been recognized by various international awards, such as the Special Environmental Award of the CleanTech Open Global, the MIT Technology Review Innovators Under 35 Award or as a FrenchTech Ambassador Startup at the UN Summit on Climate Change in Paris.

However, as aspiring technological leaders, we are facing the daunting challenge of an ever-moving technological frontier. Our long-term success rests on our ability to keep continuously improving the accuracy, stability, breadth and relevance of our technologies and their applications for citizens, governments, researchers and corporations. This requires access to cutting-edge atmospheric sciences research infrastructure.

We are therefore certain that, as we have already tremendously benefited from your support and that of your colleagues at Université Paris-Est Créteil Val de Marne, we will clearly deeply benefit from the exchange of expertise and knowledge within the broader EUROCHAMP community. We look forward to discussing plans to test our sensing technologies and their further evolutions and refinements at the chamber facilities.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general, to help us compete in the important emerging field of distributed environmental sensing applications.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels of our products as well as their applications – especially to atmospheric sciences, epidemiology – and their success in the marketplace as open and disruptive innovations, helping improve transparency and access to information on air quality for European citizen.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours truly,

Plume Lab 75847 F RCSP

Romain Lacombe Plume Labs, President

Plume Labs SAS I 38 rue Dunois, 75647 Paris cedex 13, France I team@plumelabs.com



Pilot Photonics, Invent Centre, Dublin City University, Glasnevin, Dublin 9, Ireland. Ph: +353-(0)1-700-7993 E: info@pilotphotonics.com

Sunday, 28 February 2016

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

Dear Prof Doussin,

## EUROCHAMP-2020 Associated Partnership

Pilot Photonics is very pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Our core business is in the design and manufacture of robust, cost-effective optical comb sources for the telecommunications industry. However, we have also begun to explore the possibility of applying our technology in other markets, including gas sensing. Our technology has several advantages over currently used single-mode or swept external cavity lasers in this market and we are engaged in R&D work to prove this hypothesis before developing a product and launching it to the market. In particular, we see the analysis of very low concentrations of atmospheric gases as a niche that suits our technology very well, and we would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test our comb sources for trace gas analysis at the chamber facilities.

I wish you every success in your application and I eagerly anticipate a positive outcome and the opportunity to become an associated partner.

Yours sincerely,

Dr. Frank Smyth, Chief Executive Officer



# Nanothinx S.A.

Research & Development of Carbon Nanotubes S.A.

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

Date: March 21st, 2016

## Re: EUROCHAMP-2020 Associated Partnership

Dear Prof. Doussin:

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner. Nanothinx is a technology company focusing on the production of nanotubes of very high purity, mainly for multi-walled carbon nanotubes. This is achieved by exploiting our patented proprietary production method and catalysts. We are interested in the assessment of the environmental fate of nanomaterials that we produce. We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and we would be happy to test the atmospheric evolution of different types of nanotubes at the corresponding chamber facilities. We believe that our partnership with EUROCHAMP-2020 will support our innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of our industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Sincerely yours,

atapatopper

Dr. Katerina Kouravelou R&D Manager, Nanothinx S.A.

TANK DA' HATPO 1585 - 4 AL 59423/22/8/05/33 Kalliopi Legaki

President & CEO Nanothinx S.A.

Nanothinx S.A. P.O. Box 1414

Stadiou Street, Platani



Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

21<sup>st</sup> March 2016

## **EUROCHAMP-2020 Associated Partnership**

Dear Prof. Doussin,

We are delighted to hear of the EUROCHAMP-2020 initiative, and even more pleased that we have been invited to respond to you as potential ASSOCIATE PARTNERS.

Kore Technology Ltd is a UK-based commercial company that has been developing and manufacturing analytical equipment for 25 years now, and in the last several years we have placed more emphasis on tools for environmental monitoring. This has resulted in mass spectrometers using soft ionisation techniques for real time, sensitive analysis of VOCs, as well as portable spectrometers for chemical spills, fence line monitoring etc. We have many new initiatives underway for more compact, lower cost instruments aimed at the environmental monitoring marketplace.

Manufacturers of equipment generally followed a linear model, meaning that the manufacturer create a product, users buy it and then proceed to use the tool. What is missing in this model is a structural means for the users to provide not just feedback, but to be in a *constructive dialog* with manufacturers of analytical tools. Many of our users are involved in various field campaigns, and so it makes complete sense that we should be much more intimately involved with what our users are doing so that what is developed in the future directly relates to the challenges that users encounter in their field measurements. The opportunity for an engineer from our company to participate in chamber activities could provide valuable insights that are only understood when watching close at hand what users are trying to do.

I particularly appreciate the desire to strengthen and expand the engagement of industry users over the period 2017-2020; I think that is a hugely significant new insight in what would

Telephone (Int. + 44) (0) 1353 653030 Facsimile (Int. + 44) (0) 1353 653031 email info@kore.co.uk http://www.kore.co.uk otherwise be just another academic program, because it acknowledges that the challenges do not lie solely in the hands of academic researchers but in a larger community that includes industrial partners. We are particularly interested in developing equipment with lower costs so that there can be a greater uptake of users throughout the world as we face these global environmental challenges. In our opinion there are no prizes for developing yet more expensive tools that only a few rich (Western) users can afford.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We fully support your H2020 application for funding this valuable infrastructure and we wish you (and all those assembling this bid) every success.

Yours sincerely

Fraser Reich

Fraser Reich, Ph.D. Project Manager Kore Technology Ltd.



Kongsberg Maritime Contros GmbH Wischhofstraße 1-3 Bid. 2, 24148 Kiel

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

Kongsberg Maritime Contros GmbH Wischhofstraße 1-3, Bld. 2 24148 Kiel Germany

Contact: Peer Fietzek

Phone: +49 431 600 564-0 +49 431 260 959 01 Fax Email: peer.fietzek@km.kongsberg.com Web: http://www.km.kongsberg.com

March 17th 2016

#### EUROCHAMP-2020 Associated Partnership

Dear Prof Doussin

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Kongsberg Maritime Contros GmbH is market leader in the development and production of subsea sensors for the determination of  $pCO_2$ ,  $pCH_4$  and  $pO_2$  in the marine environment. We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test sensor properties under different conditions at the chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours sincerely

KONGSBER ppa.

Volker Sallandt

Norgsberg Maritime Contros GmbH

Wischhofstr. 1-3, Bld. 2

Kongsberg Maritime Contros Ganiatidas, 1-3, Bid. 2 Wischhofstr. 1-3, Bid. 2, D-24145 Kiel / Germany Wischhofstr. 1-3, Bid. 2, D-24145 Kiel, Germany, Telephone +49 431 600 564-0, Telefax +49 431 260 959 01, www.contros.eu Place of registration: Amtsgeriche Kiel 91434 (600 564 0) Number: HRBS587 KI, VAT ID-Nol DE252286218 Managing Director: Sören Them Bath +60404:20095901e Bank AG, IBAN: DE86 2307 0700 0708 0922 00, BIC: DEUTDEDB237



ilinicon.contact@km.kongsberg.com www.km.kongsberg.com/contros



Denver House, Main Street, Winster, Derbyshire DE4 2DH +44 (0)1629 650442 glynhughes@btinternet.com VAT: 122 5011 75 Registered in England No 07520129

Prof. Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

9 Mar 2016

Re: EUROCHAMP-2020 Associated Partnership

Dear Prof. Doussin,

I would be delighted to accept your invitation to join EUROCHAMP-2020 as an Associated Partner on behalf of Hughes Design.

Since establishing Hughes Design, I have 25 years experience in stove design and have been responsible for the design and development of a wide range of domestic solid fuel appliances for a variety of manufacturers. I currently design for, and act as scientific advisor to, solid fuel appliance manufacturers including British Fire Manufacturers Ltd, Flavel, Portway, Mørso Janstoberi, Capital Fireplaces, Percy Doughty, Tiger Stoves, Focus Industries, Baotao Huwafeng, Penman, CSM and Dunsley Heat. Woodburning stoves entirely designed by Hughes Design form approximately 15% of appliances sold in the UK.

My field of work is in the design and development of domestic solid fuel heating equipment. Such equipment supplies about 20% of Europe's domestic heating, and, with the burning of renewables like wood and straw, could usefully be much more. Development of such products has been compromised by a lack of sound science relating to the atmospheric emissions they produce. This has often been worsened by inexperienced operators and inappropriate experimental conditions and design, without appreciation of the subtleties of small-scale solid fuel combustion. In consequence, this has led to very poor advice to governments and regulators. I have a commitment to designing the most efficient appliances with the lowest emissions, currently exceeding all UK legislative requirements and complying with the more stringent EU limits.

I understand that there is significant capability within the EUROCHAMP-2020 infrastructure to address a number of questions of importance to our industry. These include i) the identification of atmospheric markers for wood smoke / coal smoke, ii) relationships between combustion conditions and atmospheric emissions, iii) differentiation between different wood-burning sources in atmospheric samples, iv) quantification of the long- and medium-term fate of wood smoke and coal smokes and v) the fate and impact of low-grade solid fuel emissions. I have interests and / or expertise in each of the above and will be happy to be advise on the use of EUROCHAMP-202 infrastructure in these areas.

I have long-standing collaborations with organisations such as the Danish Technological Institute, the SG Environmental laboratory and heating equipment manufacturers across Europe, which I envisage being especially useful.

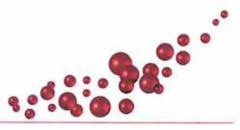
Yours

Ayre Highs.

Glyn Hughes







08.03.2016

From:

Dekati Ltd. Tykkitie 1 FI-36240 Kangasala Finland

To:

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

## EUROCHAMP-2020 Associated Partnership

Dear Prof. Doussin

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Dekati Ltd. is a company focusing on high-end aerosol measurement instrumentation. We provide instruments for various scientific research applications including ambient air quality measurements, primary and secondary particle emissions from different sources and aerosol research applications. Currently we see a great potential in secondary aerosol formation research, especially from combustion sources, and therefore we would benefit from the exchange of expertise and knowledge within the EUROCHAMP community. We look forward to discussing plans and to test and demonstrate our instrumentation at the chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support our innovative product development, as well as improve performance and technology readiness levels of our instruments.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

March 8th 2016,

On behalf of Dekati Ltd.,

al to

Mikko Moisio CEO Dekati Ltd. mikko.moisio@dekati.fi

Ville Niemelä Director, Research and Development Dekati Ltd. ville.niemela@dekati.fi



SC CONITECH SRL J37/737/2008 CUI 24506294 Barlad, Romania, CP 731175

Date 27.02.2016

# **EUROCHAMP-2020** Associated Partnership

For Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 CréteilCedex France

## Dear Prof Doussin,

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Our company, CONITECH, has competencies in designing of systems and equipment for research activities and industrial development, especially in technologies based on electrical discharges in vacuum or atmospheric pressure: cathodic and anodic electrical discharges in vacuum, plasma torch, Glide-Arc discharge, DBD (dielectric barierr discharge), etc.

Therefore, CONITECH would clearly benefit from the expertise and knowledge exchange within the EUROCHAMP community which will lead to improved and diversified skills for our company.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

As an Associate Partner, we also welcome the opportunity to participate in workshops and other networking events and provides community EUROCHAMP our experience on how infrastructure existing, or newly created, can best respond to our needs and those of potential partners in the industry.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Sincerely Phys Vasile Pelin Technical Manager, conitechbd@gmail.com

YILLI





Fast Response Emissions Analyzers Engineering Services J6 The Paddocks, 347 Cherry Hinton Road Cambridge, CB1 8DH, United Kingdom cambustion@cambustion.com Tel: +44 1223 210250 Fax:+44 1223 210190 www.cambustion.com

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

11/03/2016

Dear Professor Doussin,

## EUROCHAMP-2020 Associated Partnership

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Cambustion Ltd. is a leader in fast emissions analysers, capable of measuring directly gaseous and particulate emissions, some of our main customers are Universities and industry in the field of combustion engine research and development. We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community, and look forward to discussing plans to test our Differential Mobility Spectrometer (DMS500), Centrifugal Particle Mass Analyser (CPMA), new Aerodynamic Aerosol Classifier (AAC), and our suite of gas analysers (e.g. Fast-FID) at the chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as provide a platform to show the applications of our existing products to the atmospheric research community.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours sincerely,

Dr Martin Irwin R&D Aerosol Technologist Cambustion Ltd

Dr Jonathan Symonds CEng CPhys Managing Director (Products) Cambustion Ltd



Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

26 April 2016

Dear Prof Doussin

## EUROCHAMP-2020 Associated Partnership

Biral is very pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Our company has a long history in the development of innovative techniques for the analysis of airborne particles, ranging from the measurement of particle shape to the characterisation of distant aerosol clouds by fluorescence lidar. However, our current focus is on techniques that enable the detailed study of both the chemistry and physics of single airborne particles over an extended period of time. To this end we have collaborated with the University of Bristol to develop the first commercial Aerosol Optical Tweezers instrument (AOT100). To date this technique has been used only in laboratories and using droplets generated by simple atomisation techniques. However, many of the projects for which the technique is particularly appropriate relate to the chemistry and physics of particles in the atmosphere. Working with the EUROCHAMP community would be highly beneficial in developing the application of the technique to the more complex aerosol environments generated in the community's chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will enable us to benefit from the exchange of expertise and knowledge within the community. The Optical Tweezers technology has been designed to be adaptable to a wide range of applications and the opportunity to test it in chamber facilities will support innovative developments to meet the requirement of the community's research priorities. We would also hope that such tests will provide demonstrations of how the detailed, time-resolved analysis delivered by the instrument can enable observations not available by any other technique.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours sincerely

James M. Clark

**Chief Scientific Officer** 

Biral – Bristol Industrial & Research Associates Ltd PO Box 2, Portishead, Bristol, BS20 7JB, UK T: +44 (0)1275 847787 F: +44 (0)1275 847303 E: info@biral.com W: www.biral.com



Registered in England No: 1210956 • VAT No: GB 140 6519 87 • WEEE Reg No: WEE/DH1952ZR Directors: PD Smith CEng MIET (MD) • Ben Lockwood BA ACA (FD) • Brian Lockwood ACIB • EA Smith



# $\alpha$ lphasense Ltd

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

17th March, 2016

## ref: EUROCHAMP-2020 Associated Partnership

Dear Prof Doussin,

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner. Alphasense started in1997and has developed electrochemical, semiconductor, laser scattering and optical sensor technologies for gas sensors for use in air quality and industrial safety. The company designs, develops, manufactures and markets gas sensors to gas detector manufacturers worldwide. We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test gas sensors for sensitivity, stability and interferents for a variety of inorganic gases and VOCs at our automated gas testing laboratory.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours sincerely,

Dr John Saffell Technical Director Alphasense Ltd.

> Alphasense Ltd ■ 300 Avenue West, Skyline 120 ■ Great Notley ■ Essex ■ CM77 7AA ■ UK Telephone: +44 (0)1376 556700 ■ Fax: +44 (0)1376 335899 E-mail: jrs@alphasense.com ■ Website: www.alphasense.com









Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

24 February 2016



Dear Prof Doussin

# EUROCHAMP-2020 Associated Partnership

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.AITEX is a textile research institute which has several research lines focused on new and advanced air de-polluting materials based on textile materials (using different technologies, eg. Photocatalysis but also developing advanced air filters).

We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test this type of materials at the chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance and technology readiness levels.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.









Yours faithfully,.



Central: Plaza Emilio Sala, 1 - E-03801 ALCOY (Alicante) SPAIN - Tel.: +34 96 554 22 00 - Fax: +34 96 554 34 94 Unidad Técnica: Valencia: Tel.: 96 131 81 93 - Fax: 96 131 81 83 www.aitex.es www.observatoriotextil.com info@aitex.es



Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

Date 6<sup>th</sup> of March 2016

Dear Prof Doussin

#### EUROCHAMP-2020 Associated Partnership

We are pleased to accept your invitation to join EUROCHAMP-2020 as an Associated Partner.

Airmodus Ltd. provides aerosol particle detectors that are capable of measuring nucleation in real time and one of the main customer segments for the company is the atmospheric nucleation research. We would therefore clearly benefit from the exchange of expertise and knowledge within the EUROCHAMP community and look forward to discussing plans to test Airmodus nano Condensation Nucleus Counter (nCNC) at the chamber facilities.

We strongly believe that being an Associated Partner of EUROCHAMP-2020 will support innovative product development, as well as improve performance of the Airmodus nCNC.

As an Associated Partner we also welcome the opportunity to participate in workshops and other networking events and provide advice on how the infrastructure can best respond to our needs and those of industry partners in general.

We are delighted to be an Associated Partner of EUROCHAMP-2020 and fully support your H2020 application for funding this valuable infrastructure.

Yours

VER

PhD. Minna Väkevä

CEO

Airmodus Ltd.



AeroMegt GmbH + Olof-Paime-Straße 7a, 42657 Solingen, Germany

To the coordinator of the EUROCHAMP

Prof. Jean-François Doussin Université Paris-Est Créteil Val de Marne (UPEC) Institut Pierre Simon Laplace (IPSL) Laboratoire Interuniversitaire des Systèmes Atmosphériques Faculté des Sciences 61, avenue du Général De Gaulle 94010 Créteil Cedex France

Solingen, 25.02.2016

#### Letter of Support

Dear Prof. Doussin,

AeroMegt GmbH was founded in 2010 in Leichlingen (Germany). Within the last 5 years AeroMegt GmbH expanded to become the leading company in single particle mass spectrometry. The main products in this business segment are the LAAPTOF and the HIRULA-TOF. Besides our competence in single particle mass spectrometry our scientists are experts in mass spectrometers including Aerodyne AMS, CIMS and various standard analytical techniques.

We feel that AeroMegt could benefit significantly by working with the EUROCHAMP network. We are interested in Trans-National Access and intercalibration activities in order to open opportunities for testing our instruments at the chamber facilities in the infrastructure. We would therefore like to become an "Associated Partner" of the EUROCHAMP network. We are looking forward to attend project meetings and to contribute to the exchange of expertise and knowledge within the wider research and innovation community working in the EUROCHAMP network.

Regards

AeroMegt GmbH

Stefan Trimborn CEO

AeroMegt GmbH Olof-Palme-Str. 7a 42657 Solingen Germany

T +49212/38298810 Fax +49212/38298812

info@aeromegt.com www.aeromegt.com Geschäftsführung: Stefan Trimborn Dr. Achim Trimborn Handelsregister Köln HRB 68812 Sitz des Unternehmens Leichlingen

Steuernummer 230/5700/2379 USt-IdNr. DE270787419 Kreissparkasse Köln Kto. 370557270 BLZ 37050299

IBAN: DE82370502990370557270 BIC: COKSDE33 Support



WOLF DYNAMICS srt. Tet. -39 010 3532560 Info@wolfdynamics.com | www.wolfdynamics.com PJVA: 02113390997 Sede legale P.za Dante 8/5 16121 Genova - Italy Sede operativa Via Montallegro, 1 16145 Genova - Italy

Genova, February 25, 2016

To the attention of Prof. Paolo Prati, INFN Genova

Object: EUROCHAMP-2020

#### Statement of Interest

Wolf Dynamics srl is strongly supportive of the research infrastructure proposal EUROCHAMP which is being prepared for the upcoming H2020 Advanced Community Infrastructure Call, and looks forward to both gaining access to, and using results from, the atmospheric simulation chamber facilities as part of its efforts to produce reliable and validated flow simulation codes.

Menard how

Alessandro Bottaro Co-founder Wolf Dynamics srl



# Technologies, Expertises et Recherches Analytiques en Environnement

SAS au capital de 532 000 € Siret 438 590 390 00052 (RCS GRENOBLE) – APE 7490B

Crolles, March, 18th 2016

Mr Pascal KALUZNY TERA Environnement 628 rue Charles de Gaulle 38 920 CROLLES

**Object** : Letter for supporting the EUROCHAMP 2020 project. Attention : Mr Jean-François DOUSSIN Laboratoire Interuniversitaire des Systèmes Atmosphériques 1 Rue Pierre LESCOT 75 001 PARIS

Dear Sir,

I inform you of the full support of TERA ENVIRONNEMENT Company for the EUROCHAMP 2020 project.

TERA Environnement has worked in atmospheric chemistry for 15 years. Our interventions in the fields of high technologies, outdoor and indoor air quality allow us to apprehend many different analytical methods. Moreover, there is a real need to make measurement validation in atmospheric chambers.

So I can only strongly support the EUROCHAMP 2020 project.

Sincerely yours,

Pascal KALUZNY President an copital MENT 628 Rue Charl 38926s de Gaulle 04 26 92 10 11 - Fax 04 76 90 85 24 Tv4 Intracom - FR 35438590390

Professor Jean-Francois Doussin EUROCHAMP-2020 Co-ordinator Université Paris-Est Créteil Val de Marne (UPEC) 94010 Créteil Cedex France

Dear Prof Doussin

Date March 8th, 2016

#### Support for EUROCHAMP-2020

LIBELIUM is a leader in the field of field of Smart cities sensing solutions. We are very interested in the range of activities that can be performed within the EUROCHAMP research infrastructure and believe that we could benefit significantly by testing our products under the controlled conditions provided by the chambers. The use of the chamber facilities in this way would support innovative development of our products, as well as help improve performance and technology readiness levels.

We also feel that LIBELIUM would benefit from the opportunity to participate in workshops and other networking events which allow for exchange of expertise and knowledge within the EUROCHAMP community.

We therefore offer our full support for the EUROCHAMP-H2020 proposal and look forward to working with you in the near future.

Yours,

David Remón - Project Manager, Libelium.



Crolles, March, 18th 2016



Mr Pascal KALUZNY ECOLOGICSENSE ZI Rousset- 605, avenue Olivier Perroy 13790 Rousset - FRANCE

**Object**: Letter for supporting the EUROCHAMP 2020 project. To : Mr Jean-François DOUSSIN Laboratoire Interuniversitaire des Systèmes Atmosphériques 1 Rue Pierre LESCOT 75 001 PARIS

Dear Sir,

The ECOLOGICSENSE Company is developing specific sensors for monitoring Indoor and Outdoor Air Quality.

In order to test and to understand the behaviors of such sensors it is necessary to work in atmospheric chamber. Then, it is really obvious to test the sensor in reconstructed environments where the reactivity can also be controlled and monitored.

So I strongly support the EUROCHAMP 2020 project.

Sincerely yours,

Pascal KALUZNY President ECOLOGIC SENSE SAS H Zt Rousset - 605 Avenue Olivier Perroy 13790 Rousset - France Tél +33 (0)4 42 29 46 90 Fax +33 (0)4 42 29 46 98 SIRET 525 365 021 00012 - 0009 APE 7112 0

Muggiò, 24 febbraio 2016



I.N.F.N. Via Dodecaneso,33 16146 Genova (Ge)

Attention: Prof. Paolo Prati

Subject: Support for Eurochamp 2020

Dear Prof. Prati, first of all, thank you for bringing to our attention this remarkable activity I.N.F.N is carrying on along with other European institutes.

About the "Innovation Platform" proposal described in your communication, we always tried to promote the cooperation between research institutes/universities and private companies, especially in our field of application since the expertise and knowledge the research carried on by institutes, such as yours, can greatly improve the development and quality of our instruments.

We confirm you our interest to co-operate with Eurochamp network and we look forward to receive more information about this valuable activity in order to organize our participation.

Thank you again and Best regards,





Dado Lab S.r.l. Via C. Pavese 21, 20092 Cinisello B (MI) tel. +39 02 37904320 / 21 www.dadolab.com C S – Chromatographie Service GmbH

GC HPLC Produktion

Tel.: 0 24 23 / 4 04 93-0

Fax: 02423/40493-49

info@cs-chromatographie.de

Handel Applikation

www.cs-chromatographie.de

Pr. Jean-François Doussin Université Paris-Est Créteil Val de Marne (UPEC) Institut Pierre Simon Laplace (IPSL) Laboratoire Interuniversitaire des Systèmes Atmosphériques Faculté des Sciences 61 Avenue du Général De Gaulle 94010 Créteil Cedex

Langerwehe, Feb. 22, 2016

#### Letter of Support

Dear Prof Doussin (coordinator of Eurochamp 2020),

CS-Chromatographie Service GmbH was founded 1985 in Langerwehe (Germany) and is one of the leading manufacturers of chromatographic columns and accessories for chromatographic methods in Germany. Within the last 6 years we have successfully developed novel stationary phases for gas chromatography in cooperation together with the Forschungszentrum Jülich within the project NanoPLOT and its follow-up project NanoCARB, funded by the funded by the BMBF within the SME innovation offensive "NanoChance" funded by the German Federal Ministry of Education and Research.

We feel that CS-Chromatographie Service could benefit significantly by working within the EUROCHAMP network by testing our chromatographic phases under ambient conditions at Simulations chambers in and therefore support the Eurochamp 2020 proposal. We are looking forward to attend project meetings and contribute to the exchange of expertise and knowledge within the wider research and innovation community working in the EUROCHAMP network.

Kind regards

Helmut Roemer, CEO CS-Chromatographie Service GmbH



Produktion + Verwaltung: Am Parir 27 / Gewerbegebiet D-52379 Langerwehe

USt-Id-Nr.: DE 122290918

Steuer-Nr.: 207/5705/0474

Bankverbindungen: Sparkasse, Düren

Postbank Köln

BIC: SWIFT-Code SDUEDE33, IBAN: DE17395501100001303775 (BLZ 395 501 10), Kto.-Nr. 1 303 775 Dresdner Bank AG, Eschweiler BIC: SWIFT-Code DRESDEFF391 (BLZ 370 800 40), Kto.-Nr. 168 660 400

(BLZ 370 100 50), Kto.-Nr. 3655 13-503

Handelsregister: AG Düren HRB 1470 Geschäftsführer: Alice Büttner, Gerhard Deuster Günter Dräger, Helmut Römer

FROID INDUSTRIEL - CONDITIONNEMENT D'AIR DE PROCESS



Pr. Jean-François DOUSSIN

Université Paris EST Créteil Val de Marne (UPEC)

Institut Pierre Simon Laplace (IPSL)

Laboratoire interuniversitaire des systèmes Atmosphériques Faculté des sciences

61 avenue du Général Charles De Gaule

94010 Créteil Cedex

Brignais, 14/03/2016

clauger

#### Lettre of support

Dear Professor DOUSSIN (coordinator of EUROCHAMP 2020)

Clauger is a family society specializing in industrial refrigeration and air treatment process. For over 40 years, the specificity of the company is to provide the design, manufacture, installation and service & maintenance of its facilities.

In order to deliver air pollutants concentration to control agencies but also to control the energetic potential of their installations, the environmental division of CLAUGER is developing their own gases sensors.

The EUROCHAMP project represents for us a real opportunity to validate our gases sensors in ambient air simulated by chambers over the Europe. Moreover, EUROCHAMP is a great chance to meet European collaborators from laboratories and private companies. That's why we would like to highly support the EUROCHAMP proposal.

We are looking forward to participate to EUROCHAMP and share experiences and knowledge with research and innovation community.

Kind regards,

Yoan DUPART

Head of service measurement

Clauger ()) 7, rue de l'Industrie CS 80219 69530 BRIGNAIS - France Tél. +33(0)4 72 31 52 00

CONCEPTION . CONSTRUCTION - INSTALLATION - HAINTENANCE



Prof. Paolo Prati INFN – Istituto Nazionale di Fisica Nucleare Via Dodecaneso 33 Genova on behalf of the EUROCHAMP 2020 consortium

AR/160005/GB

# Oggetto: Support for EUROCHAMP 2020

Dear Prof. Prati,

following your letter of February 11, 2016, I express here the interest of ARIANET in the EUROCHAMP proposal for the upcoming H2020 Advanced Community Infrastructure call (H2020 INFRAIA-01-2016/2017: Integrating Activities for Advanced Communities).

ARIANET S.r.l. is an environmental consulting company based in Milan, founded by a group of scientists, experts in air pollution and meteorological modelling mostly coming from research centers and universities, active in the fields of design, development, application and marketing of integrated systems for the study of physical and chemical processes that affect emissions, transport, dispersion and chemical transformation of pollutants in the atmosphere.

Close cooperation with research centers, European and American universities and with local and national agencies for environmental protection, as well as participation in European and national research programs, allow to update ARIANET's state of knowledge and to integrate innovative modelling tools to be used in the main following fields:

- set up and installation of real-time control and supervision (nowcast) and forecast systems of air pollution;
- environmental impact studies of industrial plants (power plants, refineries, waste cycle, production plants) and civil infrastructures (roads, airports, urban areas);
- support to public authorities in the assessment and management of ambient air quality (yearly air quality assessment, source apportionment studies, air quality plans, future scenarios).

Relevant ARIANET recent activities include: support to ENEA and Italian Environmental Ministry in the development of the GAINS-Italy national integrated assessment model for air quality policy support; cooperation with a number of Italian regional and local environmental agencies to implement air pollution modelling systems for air quality forecast, assessment and management at regional and urban scale; participation to EU projects as WP leader (FP5 project FUMAPEX - urban air quality forecasting system, now fully operational in Turin urban area; FP7 project MEGAPOLI – megacities pollutant



emissions impact on air quality and climate, with focus on the Po Valley; LIFE+ project EXPAH - Population Exposure to PAH, focused to Rome).

In this perspective, ARIANET express its interest in the exchange of expertise and knowledge that may derive from the European network of chamber facilities, especially in relation of the reaction mechanisms employed in the three-dimensional chemical-transport models that are one of the key components of ARIANET mentioned systems and activities. Besides that, the substantial pool of applied and operational modelling systems set up and followed by ARIANET may also provide an opportunity for EUROCHAMP consortium for implementation and test of innovative mechanisms and parametrizations in real-world applications.

Sincerely yours,

ARIANET S.r.I. (J. II Presidente J. W. J. Brususca Dott. Giuseppe Brusasca

Milano, 23/2/2016