

# Preliminary program of the 2 day workshop: “Plasma science and entrepreneurship”

## Workshop program

November 29<sup>th</sup>

18:00	Come together and Snack (own cost) on Braunschweig Christmas Market.	
<b>Morning November 30<sup>th</sup></b>		
8:00	Doors open/coffee	
8:30	Opening	
8:40-9:10	1 <sup>st</sup> keynote Prof. <b>Dr. K.-D. Weltmann</b> , INP Greifswald, “Cold Plasma and Desinfection” ( <b>3<sup>rd</sup> floor conference room</b> )	
9:10-9:40	2 <sup>nd</sup> keynote Dr. Ir. <b>Alquin Stevens</b> , InnoPhysics bv, “Recent developments in digital $\mu$ PlasmaPrint surface engineering; from low volume science to high volume industrial applications” ( <b>3<sup>rd</sup> floor conference room</b> )	
9:40-10:10	Coffee / tea at the booth area	
10:10-10:40	3 <sup>rd</sup> keynote Prof. Dr. Ing. <b>Peter Awakowicz</b> , Ruhr-Universität Bochum, “Recent investigations in plasma-cell interaction in dermatology” ( <b>3<sup>rd</sup> floor conference room</b> )	
Start parallel workshop sessions		
	<i>Biomedical, Dermatology, food</i> <b>(3<sup>rd</sup> floor conference room)</b> Moderators: Prof. Dr. <b>K. D. Weltman</b>	<i>Atmospheric Pressure MicroPlasma</i> <b>(1<sup>st</sup> floor conference room)</b> Moderators: Dr. <b>Remi Dussart</b>
10:40-11:00	Dr. <b>Michael Thomas</b> , Fraunhofer IST, “Chemical reactive surfaces by PACVD at atmospheric pressure”	Dr. Ing. <b>Erik Beckert</b> , Fraunhofer IOF & Prof. <b>Detlev Belder</b> , Universitaet Leipzig, “Inkjet printed and plasma sintered sensoric structures for regenerative Surface Enhanced Raman Spectroscopy (SERS) surfaces”
11:00-11:20	Dr. <b>Ricardo Molina Mansilla</b> , Instituto de Quimica Avanzada de Cataluña, “Use of plasma treatments in order to improve seed germination”	Ir. <b>Yulia Onyshchenko</b> , Ghent University, “APPJ treatment of micro-scale cavities”
11:20-11:40	Prof. Dr. <b>Mahavir Singh</b> , LIONEX Diagnostics & Therapeutics GmbH, “title to be announced”	Ir. <b>Daniel Hähnel</b> , PLASMA ELECTRONIC GMBH, “The plasma driven atomic layer deposition driven allows access to new application areas”
11:40-12:00	Prof. Dr. <b>Paula Bourke</b> , Dublin Institute of Technology, “Atmospheric cold plasma technologies for food and surface decontamination”	Ir. <b>Morteza Aghaee</b> , TU Eindhoven (TU/e) /Center for Plasma Physics; “Micro-plasma printing of TiO <sub>2</sub> thin films”
12:00-12:20	Discussion, new applications, R&D cooperation’s	Discussion, new applications, R&D cooperation’s
12:20-13:20	Lunch	
13:20-13:30	Group photo	

## Afternoon November 30<sup>th</sup>

Start parallel workshop session		
	<i>Biomedical, Dermatology</i> <b>(3<sup>rd</sup> floor conference room)</b> Moderators: Prof. Dr. <b>Ing. Peter Awakowicz</b>	<i>Surface Modification &amp; -Analysis, Nanoparticles</i> <b>(1<sup>st</sup> floor conference room)</b> Moderators Dr. Ing <b>Erik Beckert</b>
13.30-13.50	<b>Renate Schönebeck</b> , Neoplas GmbH, "Latest research results as a basis for extensions of therapeutic indications in plasma medicine"	Dr. <b>Remi Dussart</b> , CNRS/Université d'Orléans, "DC micro discharge arrays"
13.50-14.10	Dr. <b>Stefan Nettesheim</b> , Relyon Plasma, "Effect of atmospheric plasma on crystalline polymer surfaces"	Dr. Ir. <b>Martijn van Dongen</b> , Fontys, "Application of biomolecules for biomedical sensing applications through plasma treatment"
14.10-14.30	Dr. <b>Paola Brun</b> , University of Padova, "Effects of cold plasma generated by ionization of a helium flow on cells and tissues"	Dr. <b>Aggelos Zeniou</b> , NCRS Demokritos, ""Smart" plasma nanotextured surfaces for Life Sciences and microfluidics"
14.30-14.50	Dr. Ir. <b>Bas Zeper</b> , PlasmaCure, "Treatment of diabetic foot wounds with an atmospheric cold plasma"	Dr. Ir. <b>Hans Mulders</b> , FEIco, "Surface analysis and local surface modification by electrons and ions"
14:50-15:10	Coffee Break	Coffee Break
15.10-15.30	Morten <b>Thrane, Tantec</b> , "Activation and functionalization of polymers for medical applications"	Dr. <b>Chris Spacie</b> , Haydale Graphene Industries plc, "Use of plasma to deposit functional groups onto graphene and nano particles"
15.30-15.50	Prof. <b>Dimitrios Mataras</b> , University of Patras, " Atmospheric Pressure Plasma Deposition of barrier coatings for drug delivery applications"	PhD MSc <b>Bart van Limpt</b> , Delft IMP, "Scaleable plasma/ ALD coating of particles for controlled release of pharma- and nutraceuticals"
15:50-16:10	Ir. <b>Sandra Schröter</b> , University of York, "Investigating the production of reactive species in atmospheric pressure plasmas using experiments and simulations"	Ir <b>Aaike van Vugt</b> , VSParticle BV, "Supporting scientist to produce NanoParticles with plasma technology"
16:10-16:30	Discussion, new applications, R&D cooperation's	Discussion, new applications, R&D cooperation's
16.30-16.50	Coffee Break	
	<i>Subject; Surface Analytics, Metrology</i> <b>(3<sup>rd</sup> floor conference room)</b> ISC Moderator: Ir. <b>Hugo de haan</b>	<i>Lab tour</i>
16.50-17.10	<b>Daniel Scholz</b> , DataPhysics, "Measuring Adhesive Forces of Liquids on Solid Surfaces using a Tensiometer"	Center for Tribological Coatings (mainly low pressure plasma processes )
17.10-17.30	Ing. <b>Joop Schep</b> , InnoPhysics, "visualization of plasma patterned surfaces"	Atmospheric pressure plasma department
17.30-17.50		Analytics department
19:30	<b>Evening program</b> (dinner), Steigenberger Parkhotel Restaurant, Nîmes Strasse 2, Braunschweig	

## Morning December 1<sup>st</sup>

8:30-9:00	Doors open/coffee	
9:00-9:05	Opening	
9:05-9:35	1 <sup>st</sup> Keynote speaker; Prof. <b>Dr. Claus-Peter Klages</b> , Institut für Oberflächentechnik der TU Braunschweig (IOT) & Fraunhofer-Institut für Schicht- und Oberflächentechnik, "Combinatorial methods for DBD-based surface technology" ( <b>3<sup>rd</sup> floor conference room</b> )	
9:35-10:05	2 <sup>nd</sup> keynote speaker; Dr. <b>Juergen Lang</b> , Evonik GmbH, "75 Years of Plasma Chemistry at Evonik - a Success Story" ( <b>3<sup>rd</sup> floor conference room</b> )	
10:05-10:30	Coffee and tea at the exhibit area	
	Start parallel workshop session	
	High throughput & Roll-to-Roll (R2R), CVD and ALD ( <b>3<sup>rd</sup> floor conference room</b> ) Moderator: Dr. Ir. <b>Hindrik de Vries</b>	Low temperature CVD/ALD ( <b>1<sup>st</sup> floor conference room</b> ) Moderators: Prof. Dr. <b>Volker Hessel</b> & Dr. Dirk Hegemann
10:30-10:50	Dr. <b>Stephen Coulson</b> , P2i, "Plasma processing of over 100m mobile phones for global electronic manufacturers"	Prof. Dr. <b>Volker Hessel</b> , TU Eindhoven (TU/e), "Plasma catalysis for process chemistry and windows of opportunity through green energy: N-fixation"
10:50-11:10	Dr. Ir. <b>Hindrik de Vries</b> , FOM institute DIFFER, "Synergistic two-step processing of moisture barrier films using atmospheric pressure PECVD"	Dr. <b>Dirk Hegemann</b> , Empa Swiss Federal Laboratories for Materials Science and Technology, "Potential of vertical chemical gradients in plasma polymer films"
11:10-11:30	Dr. <b>Thomas Willers</b> , KRÜSS GmbH, "The liquid needle for contact angle measurements: further developments, theoretical background and its application to monitor plasma activation in automotive industry"	Prof. Dr. <b>Wolfgang Viöl</b> , Fraunhofer IST Gottingen, "DBD Application in Everyday Life".
11:30-11:50	Coffee Break	
11:50-12:10	Dr. Ir. <b>Yves Creyghton</b> , Solliance, TNO, "High throughput spatial ALD using recent developments in plasma technology"	Dr. <b>Angel Barranco</b> , Instituto de Ciencia de Materiales de Sevilla, "Multifunctional organic thin films by remote plasma assisted vacuum deposition"
12:10-12:30	Dr. <b>Florian Brehmer</b> , AFS and Softal Corona & Plasma GmbH, "Technology involved in industrial roll-to-roll application of large DBD systems"	Dr. Ir. <b>Harm Knoops</b> , Oxford Instruments, "Atomic Layer Deposition of Conductive Films at Low Temperature"
12:30-12:50	Dr. <b>Rudi Weidlich</b> , GRT GmbH, "High resolution printing by combining plasma and rotogravure printing"	Dr. <b>Paolo Scopece</b> , Nadir S.r.l. Plasma & Polymers, "The Nadir Stylus Plasma jet: a novel solution for surfaces functionalization of heat sensitive materials"
12:50-13:00	Discussion, new applications, R&D cooperation's	Discussion, new applications, R&D cooperation's

## Afternoon December 1<sup>st</sup>

13:00-14:00	Walking lunch at the exhibition area	
Start parallel workshop session		
	<i>High throughput &amp; Roll-to-Roll (R2R), CVD and ALD</i> <b>(3<sup>rd</sup> floor conference room)</b> ISC Moderator: Ir. <b>Hugo de Haan</b>	<i>Recent product innovations in plasma and power supplies</i> <b>(1<sup>st</sup> floor conference room)</b> Moderator: Dr. Ing. <b>Guus J.M. Peemen</b>
14.10-14.30	Dr. Ir. <b>Jan Bouwstra</b> , FUJIFILM Manufacturing Europe BV, "A breakthrough in R to R atmospheric plasma processing for large scale industrial use"	Dr. Ing <b>Guus J.M. Peemen</b> , TU Eindhoven (TU/e), "Pulsed power technology and transient plasmas for efficient processing"
14.30-14.50	Dr. <b>Dana Borsa</b> , Meyer Burger (Netherlands) B.V., "Versatile roll-to-roll spatial ALD production equipment for flexible devices"	Dr. Ir. <b>Vincent Vons</b> , VFA Solutions (Virusfreeair) BV, "Corona plasmas for air cleaning applications"
14.50-15.10	Dr. <b>Bert Verheyde</b> , SuMAT and VITO NV, "Chemical functionalization through atmospheric plasma in roll-to-roll processes"	<b>Voldemars Belakovs</b> , Alpha Solutions BV, "Plasma cleaning soil and vapor"
15.10-15.30	Dr. <b>Andreas Holländer</b> , Fraunhofer IAP, "R2R surface functionalization of polymer films with an emphasis on a sophisticated surface chemistry"	<b>Florian Meyer</b> , Gencoa Ltd., "A Novel Sensor Using Remote Plasma Emission Spectroscopy For Monitoring And Control Of Vacuum Processes"
15.30-15.50	Dr. <b>Pavel Kudlacek</b> , Holst Centre TNO, "Is a roll-to-roll production of 10 <sup>-6</sup> g/m <sup>2</sup> /day moisture barrier film feasible?"	Discussion, new applications, R&D cooperation's
15.50-16.10	Dr. <b>Evangelos Gogolides</b> ; NCSR Demokritos & Nanometrisis, "Fractal, and hybrid metrology of nanostructures or R2R"	Open
16.10-16.30	Discussion, new applications, R&D cooperation's	Open
16:30-17:00	Presentations of workshop findings by moderators , plenary discussion	
17:00	Closure	