

22 JUNE 2023 WARSAW POLAND



ISO NTech

**Fifth International Symposium
on Nicotine Technology**

WELCOME TO THE FIFTH INTERNATIONAL SYMPOSIUM ON NICOTINE TECHNOLOGY

2017 saw the first edition of the International Symposium on Nicotine Science and Technology (ISoNTech). This event is not a trade show, but rather a science and technology ‘show and tell’, where developers and manufacturers of safer nicotine alternatives are invited to demonstrate new products and discuss their design and key features, which make them viable options to assist smokers to transition.

The range and variety of devices and products that assist smokers to transition to safer ways to use nicotine has grown exponentially over the past decade and a curious and knowledgeable audience - including consumers of products - makes ISoNTech a unique and valuable learning opportunity to examine the many alternatives now available.

The three-day exhibition is supported by a dedicated seminar, where presentations give more detail of the devices and products, followed by question-and-answer sessions, involving the audience.

Feedback from both exhibitors and attendees about the content and format for ISoNTech has been positive. The opportunity to have discussion about a range of technologies in one place providing a wider context for people to make judgements on the various alternatives available, whilst also providing ‘live’ feedback for the exhibitors.

Once again with a focus on innovation, this year we have a diverse range of devices and products presented by their manufacturers, which includes vapour, heated tobacco and oral alternatives to smoking, reflecting the growth in the field in recent times. We hope that you will avail yourself of the opportunity to ask the questions you might have and scrutinise the claims made for the products exhibited.

We are delighted to welcome back Charlie Hamshaw-Thomas as the host for ISoNTech 2023, a role he first performed in 2019, prior to the two-year hiatus resulting from COVID.



Many of you will already know Charlie from his work in tobacco harm reduction. He worked (2011-2015) with the two founding shareholders of E-Lites, the pioneering brand at the forefront of the UK vaping industry’s explosive early growth, leading E-Lites’ external engagement in London, Brussels and Washington DC - when governments and regulators were first turning their attention to the ‘new nicotine’ category. He also led E-Lites’ business development initiatives, which culminated in the sale of E-Lites to Japan Tobacco International in 2014. Since 2015, he has undertaken some consultancy roles to, and remained a close and enthusiastic observer of, the new industry. Charlie’s fervent wish is to see the industry truly realise its disruptive potential.

We hope that you enjoy ISoNTech and look forward to receiving your thoughts and feedback, which will assist us in preparing and delivering future editions.

The Conference Team

ISoNTech EXPO PLAN



- 1. PMI SCIENCE
- 2. JTI SCIENCE
- 3. SWEDISH MATCH
- 4. ALTRIA



- 1. MTZ / PRATIA
- 2. SMISS TECHNOLOGY
- 3. ICCPP GROUP
- 4. BRITISH AMERICAN TOBACCO



- 1. A BLUEPRINT FOR GLOBAL RRP E-WASTE MANAGEMENT
- 2. ‘CLEARING THE AIR’ BOOK
- 3. AMPLICON
- 4. NICOVAPER



- 1. HUBEI / HENO

22 JUNE 2023

09:30 - 14:00

FOYER

REGISTRATION AND VIEWING EXHIBITION

12:30 - 14:00

NETWORKING & LIGHT LUNCH



14:00 - 14:10

BALLROOM

CHARLES HAMSHAW-THOMAS

WELCOME

14:10 - 14:35

BALLROOM

PMI SCIENCE
NAZAN GUNDUZ

INNOVATION OF REDUCED RISK ALTERNATIVES: ORAL TOBACCO AND NICOTINE PRODUCTS



14:35 - 15:00

BALLROOM

SWEDISH MATCH
BRIAN E. ERKKILA

NICOTINE POUCHES: THE FUTURE OF ORAL NICOTINE PRODUCTS

Swedish Match.

15:00 - 15:20

COFFEE BREAK



15:20 - 15:45

BALLROOM

ALTRIA
MOHAMADI SARKAR

THE HARM REDUCTION OPPORTUNITY OF MODERN ORAL TOBACCO PRODUCTS



15:45 - 16:00

BALLROOM

MTZ CLINICAL / PRATIA
AGATA KIELKIEWICZ

CLINICAL TRIALS IN A PROCESS OF UNDERSTANDING NICOTINE-CONTAINING PRODUCTS.



16:00 - 16:25

BALLROOM

JTI SIENCE
SHIGEAKI ITO

ORGAN-ON-A-CHIP: A CUTTING-EDGE TECHNOLOGY FOR TOXICOLOGICAL ASSESSMENT OF HEATED TOBACCO PRODUCTS.



16:25 - 16:45

COFFEE BREAK



16:45 - 17:00

BALLROOM

ICCP GROUP
MILAS WANG

ALL CREATIVE TECHNOLOGY AND PRODUCTS FOR BRIGHT FUTURE



17:00 - 17:15

BALLROOM

SMISS TECHNOLOGY
AGATA KIELKIEWICZ

ULTIMATE PERFORMANCE OF TOBACCO FLAVOR E-LIQUID ON CERAMIC COIL



17:15 - 17:20

BALLROOM

CLOSING

17:15 - 18:00

REFRESHMENTS & NETWORKING





PMI SCIENCE
PHILIP MORRIS INTERNATIONAL

INNOVATION OF REDUCED RISK ALTERNATIVES: ORAL TOBACCO AND NICOTINE PRODUCTS

Recent technological developments of new smoke-free products such as heated tobacco products, e-vapor products and oral nicotine pouches that have the potential to provide nicotine with fewer and lower levels of harmful chemicals compared with combustible products like cigarettes have made it possible to offer a portfolio of smoke free products to adult smokers who would otherwise continue to smoke as alternatives to cigarettes and other combusted products.

Nicotine pouches are a relatively new addition to the market of oral nicotine products and have been present on the US market since 2016 and in Europe since 2018. These pouches are similar to snus but, do not contain tobacco. Instead, nicotine pouches contain tobacco-derived or synthetic nicotine, flavorings, and other ingredients.

The scientific assessment of oral products, like nicotine pouches, that substantiates the reduced risk potential includes characterization of the chemical composition of the product, pre-clinical and clinical toxicological assessments, and product use characterization.

In this presentation we discuss low risk potential of nicotine pouches and their place in the risk continuum of tobacco and nicotine containing products.



Nazan Gunduz

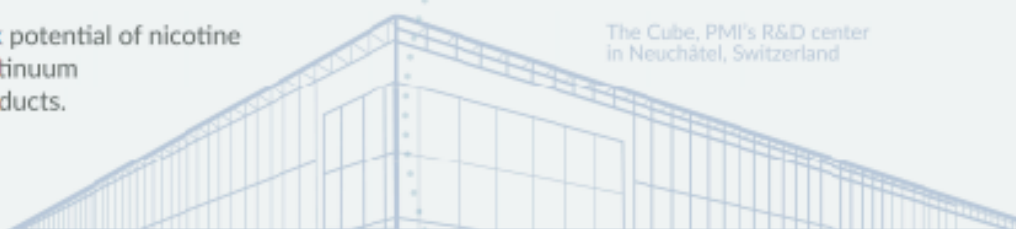
Reduced Risk Products
Oral Smokeless Category
Program Leader

Nazan Gunduz holds an MSc in Polymer Chemistry and a PhD in Polymer Science and Engineering from Virginia Polytechnic University in the USA.

Since 2006, Nazan has held various positions at Philip Morris International (PMI). She uses her expertise in chemistry, engineering materials, product development and scientific review as part of her daily work to substantiate the reduced risk profile of products in the oral smokeless category. As part of the Category Management Team, Nazan's role includes defining and deploying global regulatory and scientific assessment strategies and overseeing end-to-end Life Sciences projects.

Nazan has 20 years of experience in tobacco and smoke-free products, chemistry, design, development, and commercialization of proprietary engineering materials, Six-Sigma Continuous Improvement, filed patent applications and published in international scientific journals.

The Cube, PMI's R&D center
in Neuchâtel, Switzerland



Swedish Match®

Nicotine Pouches: The Future Of Oral Nicotine Products

The risk of a man dying from a tobacco-related illness is less in Sweden than in any other European country, although tobacco consumption is on a comparable level with that of other countries in Europe. Researchers refer to this paradox as "the Swedish Experience". It was this epidemiological data as well as the low levels of harmful and potentially harmful constituents (HPHCs) which lead Swedish snus to be the first modified risk product authorized by the US FDA and to communicate to consumers that switching from cigarettes to Swedish snus lowers a consumers risk for mouth cancer, heart disease, lung cancer, stroke, emphysema, and chronic bronchitis.

This brings us to the next evolution of oral nicotine products, nicotine pouches. Nicotine pouches are spit-free, tobacco-leaf free pouches which are used in a similar manner to Swedish snus (placed in the upper lip for ~30 min), that provide an alternative for adults who cannot or will not stop using cigarettes or other traditional tobacco products. They are generally made of a plant-based pouch filled with nicotine that meets pharmaceutical standards along with food-grade flavorings and ingredients. From a chemical perspective, nicotine pouches have even lower levels of HPHCs than Swedish snus. Compared to a cigarette, nicotine pouches have at least 99% lower levels of HPHCs. However, even with this favorable toxicological profile, nicotine pouches are able to deliver nicotine to an adult consumer equal to or even more effectively than Swedish snus.

Today's presentation will focus on our scientific assessment of nicotine pouches including discussion of product chemistry, toxicology, perceptions, and patterns of use.



Brian E. Erkkila | Director Regulatory Science, Swedish Match North America

In this role Brian works to address research gaps in the field of tobacco harm reduction and ensures that regulatory submissions have the appropriate scientific rigor to support their marketing as appropriate for the protection of public health. A neuroscientist by training, he has previously worked at the National Institute of Child Health and Human Development, the FDA Center for Tobacco Products, and the Foundation for a Smoke-Free world prior to joining Swedish Match in 2021.

The Harm Reduction Opportunity of Modern Oral Tobacco Products

Presentation By: Dr. Mohamadi Sarkar

Altria is Moving Beyond Smoking™ by advocating for a harm reduction framework that supports transitioning adults who smoke and can't or won't quit to FDA-authorized smoke-free products. While smoking prevalence is declining in many countries, millions of adults continue to smoke despite the negative health consequences. To accelerate the decline in smoking, we must look beyond public health strategies that simply promote cessation and embrace harm reduction strategies that provide adults who smoke with a portfolio of smoke-free products as well as truthful and accurate information about those products.

The journey to smoke-free products for adults who smoke is complicated, personal and unique. And along their journey, they will experience motivators as well as barriers to switching to smoke-free products.

One key motivator that helps adults who smoke get started on their journey is having access to a portfolio of satisfying, smoke-free products. In the United States, this is possible only if we have an efficient, transparent FDA regulatory framework and pathways to market authorization.



And when there is a market of smoke-free products, adults who smoke deserve and want truthful and accurate information on nicotine and the relative risk between combustible and smoke-free products to make informed decisions. Without choices and information, adults who smoke are forgotten.

In his presentation, Dr. Sarkar will discuss the harm reduction opportunity of modern oral tobacco products, including on!® and the recently announced on! PLUS®. Specifically, Dr. Sarkar will discuss:



- Scientific data demonstrating that on!® meet FDA standards of "Appropriate for the Protection of Public Health"
- The importance of options, including flavors, to adults who smoke, as motivation to switch
- The need to provide truthful and accurate information on nicotine and relative risk between combustible and smoke-free products

Join us from 15:20–15:45 on Thursday, June 22, for Dr. Sarkar's presentation. We also invite you to engage with us at our booth.



Dr. Mohamadi Sarkar, M.Pharm., Ph.D., FCCP, is a Fellow, Scientific Strategy & Advocacy, Regulatory Affairs for Altria Client Services. In this role, he provides strategic direction toward developing the science and evidence for regulatory submissions for smoke-free tobacco products for Altria's tobacco operating companies.



Altria

Altria Client Services



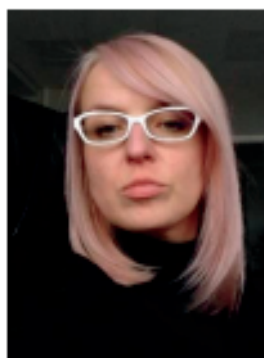
Clinical Trials in a process of understanding nicotine-containing products.

MTZ Clinical Research powered by Pratia, has been on the clinical research market for 21 years. With **5 000+** Smokers in own database, we aim to conduct studies on nicotine-containing products.

Experienced and Reliable partner in the collection and delivery of high quality data.

- ✓ Pharmacokinetics Profiles
- ✓ Biomarkers Assessment
- ✓ Safety Profiles
- ✓ Efficacy Profiles
- ✓ Pharmacodynamic Profiles
- ✓ Adverse Events
- ✓ Interactions

- ✓ Nicotine craving
- ✓ Urge to smoke
- ✓ Willing to quit smoking
- ✓ Relief of withdrawal symptoms
- ✓ Product liking
- ✓ Satisfaction from use
- ✓ User's preferences



Agata Kielkiewicz

Business Development and Proposal Manager, Early Phase at Pratia S.A.

Economist having worked in clinical trials for over 15 years.

Experienced in managing and interfacing with biopharma clients, including the ongoing relationship building with potential clients, preparing proposals to meet client requirements and representing the organization at various conferences or events.

How? Go to www.mtz-clinical.pl to find out more.

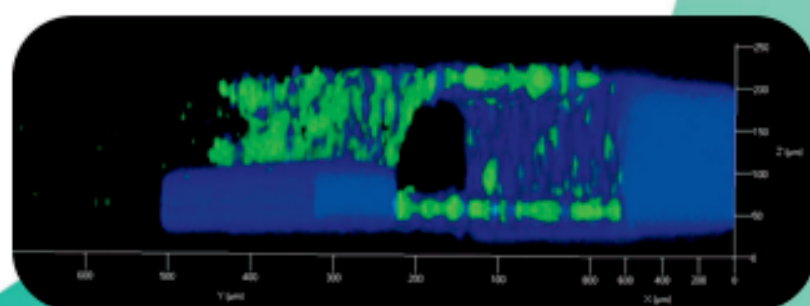
JT SCIENCE

ORGAN-ON-A-CHIP: A CUTTING-EDGE TECHNOLOGY FOR THE TOXICOLOGICAL ASSESSMENT OF HEATED TOBACCO PRODUCTS

Heated tobacco product (HTP) aerosols typically contain lower levels of toxicants, and elicit reduced biological responses in traditional toxicological assays, compared to cigarette smoke. In order to further investigate the relative toxicological profile of HTP aerosols compared to cigarette smoke, we are utilizing a range of 'new approach methodologies' (NAMs), including organ-on-a-chip (OoC) technology.

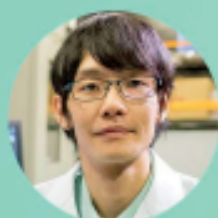
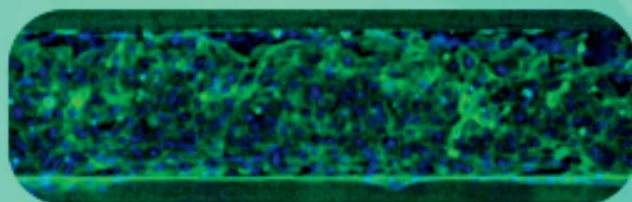
OoC consists of miniature tissues grown inside microfluidic chips, allowing control of the cellular environment. OoC platforms are intended to better mimic the main aspects of human physiology, providing great opportunities for researchers to perform more detailed analyses including mechanistic elucidation in a reproducible and controllable manner.

In this presentation, we will show examples of OoC applied to assessment of Ploom X, a novel HTP.



◀ Image of Nuclei and cytosol on the chip

▼ Image of Nuclei and Plasma membrane on the chip



Dr. Shigeaki Ito
RESEARCHER, SCIENTIFIC
PRODUCT ASSESSMENT
CENTER, R&D GROUP

After a PhD degree in agriculture, Dr. Ito joined us in 2010. Since 2016, he has been developing a way to consolidate various biological assessment results obtained from in vitro, in vivo, and clinical studies to better interpret the Reduced-Risk (RR) potential of our proprietary products. He is now mainly responsible for the development of new approach methodologies to build a clinically relevant way for RR potential assessment.

Please visit our booth to know more about his and our science on RR potential assessment.

Visit JT
Science
for more
info



JT SCIENCE

All Creative Technology And Products For A Bright Future

THR is a long-term persistent public health strategy of ICCPP Group that is to provide adult consumers a wider range of less public health risk and enjoyable ENDS products to minimize the negative health impact of smoking. Given the public's concerns about the known and potential risks of e-cigarettes, ICCPP Group has focused its THR research on two areas.

- **The Reduction of Harmful Releases**
- **The Reduction of Environmental Impacts**

Firstly, ICCPP focuses that the working process of Vaping can be divided into two steps, and harmful substances will be generated in the first step.

- E-liquid boils to form hot vapor;
- Hot steam and cold air mix and condense to form aerosols.

Therefore, the core of the vaping safety control is the temperature control of the boiling of E-liquid on the surface of porous media. The Study introduces three key methods of temperature control,

- **Control of E-liquid Flow Rate**
- **Control of The Composition of E-liquid to Reduce Boiling Point**
- **Program Control for Preventing Dry Burning**

In addition, considering potential environmental risk, ICCPP has creatively developed world's 1st dual eco-friendly disposable vape solutions, named "Cyclo", which combines the concept of detachable design with biodegradable design, ahead of the industry to make the whole device disassembly and recycle and to achieve a perfect balance of user portability, recyclability and sustainability.



CYCLO THE CYCLE OF ALL THINGS

Origins of Cyclo

The name of "Cyclo" comes from "Cycle of all things", representing our dedication and determination to promoting environmental sustainability in all areas of business, as well as a better vape lifestyle. It depends on the features below.

- **Creative PLA material**, derived from renewable resources, such as corn kernels, is the key to make cyclos biodegradable;
- **Innovative leadless and modular design** enables it easily disassembled for recycling or disposal, minimizing the environmental impact of manufacturing and using processes;
- Optional advanced atomization coil technologies, including **mesh coil technology** and **Gene Tree ceramic coil technology** in "Cyclo" series, result in a longer lifespan, less material waste, and more pure and consistent tastes, attributing to a better substitute for adult smokers.

ICCPP GROUP

— Parent Company of VOOPOO —

WWW.ICCPP.COM

ICCPP Group is a comprehensive electronic atomization ecological group with the whole industrial chain layout. It is rapidly developing with a new business model of matrix, internationalization and platform, integrating technology R&D, product design, intelligent manufacturing, brand operation and supply chain management.

ICCPP ODM+ is an innovative ODM strategic cooperation model created by ICCPP Group in 2022, which puts forward the business proposition of "branding first, product integrating technology and marketing", and commits to the best one-stop electronic atomization solution provider.



Dr. Milas Wang

Global head of Innovation Research Institute, Chief Atomization Scientist / ICCPP Group

He is the technical leader of Guangdong Provincial Engineering Technology Center and has focused on research in the field of atomization for over ten years, mainly researching low-temperature atomization technology and conducting atomization safety research.

Dr. Milas published the first SCI paper to study the structure of atomizers in the electronic atomization industry, and won Shenzhen Science and Technology Achievement Award. Currently, nearly 100 patents have been applied for, including technologies on anti-condensation, pressure balance and dry burning prevention.

Ultimate Performance of Tobacco Flavor E-liquid on Ceramic Coil



Who we are

Founded in 2012, SMISS stands for two factories, our own in-house e-liquid factory and world-class e-cigarette manufacturing facility, we believe only with science of hardware and consumable can make us success.



Background of our pursuit

We believe the nature of vape will be alternative to the traditional smoking, and tobacco flavor can do the job. Selling a good vapor product with tobacco flavor is crucial for vape brand owners. Professionals are well aware of ceramic coil is the ultimate platform for tobacco flavor category, however, the industry had been stagnant with problems such as “extract-clogging” inside the coil.



What we have achieved

Spring 2023, SMISS proudly announced that we generated multiple solutions which can fully facilitate the perfection factors, and deliver the fine tobacco flavor beyond consumers' imagination. Our ceramic coil compatible with most tobacco flavor e-liquid made by the peers and goes best with SMISS e-liquid, we look forward to communicate with the industry and GFN.



Jackie Zhuang

Special Consultant

Smiss Tech. China

en.smisstech.com

cherry.pan@smisscigarette.com

Mr.Zhuang holds an MBA degree from Maastricht School of Management and DBA candidate.

Mr.Zhuang is true veteran of the vape industry, who has 14 years of experience in the broad reduced risk tobacco portfolio, he was China-based and started the career as VP of the world's first eliquid factory. He later on involves in different sub-sectors in his 14 years of career, such as vape hardware manufacturing and trading, vape trade show organization, heated tobacco R&D and trading, and also the broad cannabis-hemp product development. Mr.Zhuang has been working for Smiss Tech. Since Feb 2022, the new iconic leading manufacturer of the disposable vape category. He aims to introduce the latest technology to the top players of the world and share the same vision of a smoke-free future.

Building A Better Tomorrow™

Over the past 10 years we have been transforming into a truly multi-category consumer products business, with a mission to stimulate the senses of new adult generations. Today, we are creating new products that encourage adult smokers to switch to scientifically-substantiated, less risky alternatives.*†

PRODUCT SCIENCE HIGHLIGHTS

NEW CLINICAL DATA ON **VUSE**
ILLUSTRATES BENEFICIAL PUBLIC HEALTH
IMPACT OF TOBACCO HARM REDUCTION



ONE-YEAR DATA SHOWED POSITIVE
LONG-TERM IMPACT OF SWITCHING
FROM CIGARETTES TO **GLO™**



CROSS-SECTIONAL CLINICAL STUDY OF
OUR MODERN ORAL NICOTINE POUCH
PRODUCT **VELO**



* Based on the weight of evidence and assuming a complete switch from cigarette smoking. These products are not risk free and are addictive.
† Our products as sold in the US, including Vuse, Velo, Grizzly, Kodiak, and Camel Snus, are subject to Food and Drug Administration (FDA) regulation and no reduced-risk claims will be made as to these products without FDA clearance.

BAT
A BETTER TOMORROW



IDWALA
RESEARCH

A BLUEPRINT FOR GLOBAL RRP WASTE MANAGEMENT



*A project funded by grant number W5-015 from
the Foundation for a Smoke-Free World*

BOTEC
ANALYSIS

"Groundbreaking research starts with
the right questions, and a
Back Of The Envelope Calculation"

Clearing the Air:

E-cigarettes, Regulation, and Tobacco Control

SAMUEL C. HAMPSHER-MONK
JAMES E. PRIEGER
SUDHANSHU PATWARDHAN

Foreword by Dr Donald Kenkel

AVAILABLE IN PRINT & E-PRINT
LATE 2023

BOTEC
ANALYSIS

scan to sign up
for updates



A project funded by grant number GG0039 from the
Foundation for a Smoke-Free World

Brand new!
Lasts longer.
Almost invisible.



**See you at our stand
in the EXPO zone.
småå.com**

amplicon



Nicotine USP/EP

Nicotine Polacrilex USP

Nicotine Bitartrate

Nicotine Salts

Custom Dilutions for PG and VG

Lusciously Smooth & Mellow Taste. Never Harsh.

Refined over 44 years

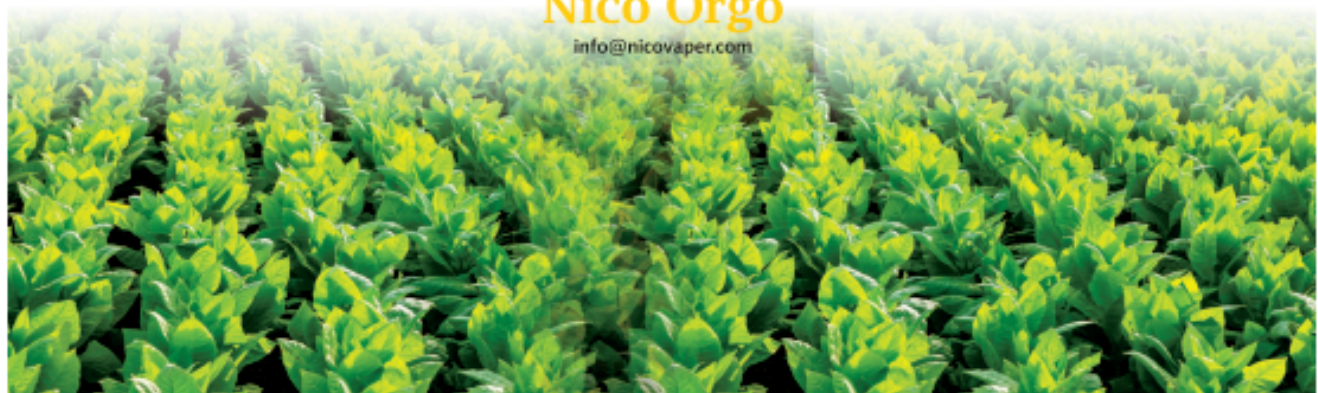


We are a zero discharge, solar powered manufacturer.
Using electric vehicles *au maximum*, harvesting rainwater and
composting or recycling all our waste.



Nico Orgo

info@nicovaper.com



THE SIXTH INTERNATIONAL SYMPOSIUM ON NICOTINE TECHNOLOGY

BOOK YOUR PLACE AT #ISONTECH24!

13 June 2024, Marriott Hotel, Warsaw Poland

Developers, manufactures and distributors are invited to demonstrate new products and discuss their design and development. The aim is to present a wide range of alternative delivery systems, including vaping products, oral pouches and tobaccos and heated tobacco products as well as ancillary technologies involved.

#ISoNTech24 will take place within a dedicated exhibition area, adjacent to #GFN24. It will run for 3 days, and will include a number of short presentation slots, on Thursday 13th June 2024, during which we aim to cover as many aspects of products and new technologies as possible. Following these there will be opportunities for 'show and tell' informal discussions throughout Friday 14th and Saturday 15th June. This will include video presentations and the opportunity to exhibit products and the technology behind them.

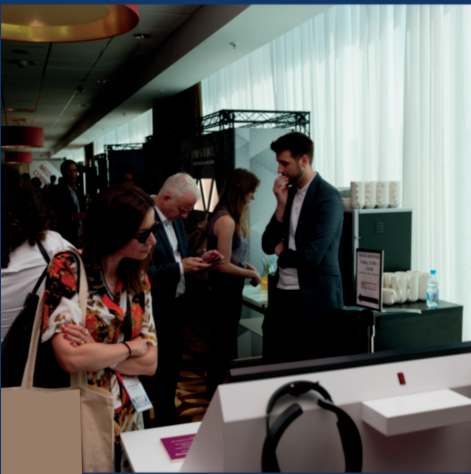
There are a limited number of slots available, so early reservation is advised.



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ISoNTech #24



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#ISONTECH24

Don't forget



13 June 2024
in Warsaw