

## Registration by FAX +49-2631-3933-33

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Code: \_\_\_\_\_ City: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Invoice Address: \_\_\_\_\_

Code: \_\_\_\_\_ City: \_\_\_\_\_

VAT-No.: \_\_\_\_\_

Order-No.: \_\_\_\_\_

### Please register these people as well:

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Attendance is limited. Please register early. Past seminars have been fully booked up soon after announcement.

For further details please contact our conference coordinator Mrs. Gabi Bechtel  
Tel: +49-2631-3933-30  
E-mail: [gabi.becht@mocon.eu](mailto:gabi.becht@mocon.eu)

## Further details:



### Location of the conference:

Schloss Montabaur  
Schlossweg  
56410 Montabaur/Germany  
Homepage: [www.hotelschlossmontabaur.de](http://www.hotelschlossmontabaur.de)  
E-mail: [info@hotel-schloss-montabaur.de](mailto:info@hotel-schloss-montabaur.de)  
Tel: +49 2602 14 -300 Fax: +49 2602 14 -106

### Hotel reservation:

With the confirmation of your registration you will receive a form for hotel room reservation. Please book your room at least 6 weeks before the seminar to ensure availability.

### Conference fee:

€ 320 per person (for German customers, customers without VAT-No. or without certificate regarding the status as taxpayer: 19 % VAT will be added). The fee includes participation, documents, lunch and refreshments.

### Language:

The conference language is English.

### Registration:

We recommend an early registration by fax with detailed invoice address and VAT-No.

### Payment terms:

Please transfer your conference fee after receipt of our invoice, latest 10 February 2015.



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## 14th International MOCON Conference

# Permeation Measurement Today

This seminar is for those involved with Barrier Material Selection, Package Testing, R & D, QA, and Barrier Specification

March 3rd, 2015,  
Schloss Montabaur  
Register soon,  
space is limited.



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# Permeation Measurement Today

## PROGRAM FOR THE DAY

**08:15**  
**Reception an Registration**

**08:45**  
**Welcome**  
Franz Sturm, MOCON GmbH, Neuwied, Germany

**09:00**  
**Permeation Basics**  
*Relationship between permeation, solubility and diffusion; Fick's Law, intrinsic and polymeric properties affecting permeation*  
Michelle Stevens, MOCON Inc., Minneapolis, USA

**09:30**  
**Permeation Measurements from the perspective of a service laboratory**  
*Options, benefits, practical examples*  
Matthias Bösel, Innoform GmbH, Oldenburg, Germany

**10:00**  
**Coffee Break**

**10:30**  
**International Permeation Standards**  
*Explanation of the different standards for measurement of O<sub>2</sub>, WVTR and CO<sub>2</sub> transmission rate*  
Christoph Zerwas, MOCON GmbH, Neuwied, Germany

**11:00**  
**New Generation of Permeation Measurement Equipment**  
*More user friendly, shorter test times, higher quality results, lower costs*  
*The new state-of-the-art technology for permeation measurement*  
Andreas Roos, MOCON GmbH, Neuwied, Germany

**11:30**  
**Challenges in High Barrier Film Development**  
*Newest results in ultra barrier film development and critical issues to confirm the properties (transmission rate measurement)*  
Dr. Klaus Noller, Fraunhofer IVV, Freising, Germany

**12:00**  
**Lunch Break**

**13:30**  
**Tips for getting Continued Quality Results**  
*Gained through experience, for use in practice*  
Hans-Peter Wagner, MOCON GmbH, Neuwied, Germany

**14:00**  
**Shelf life Prediction in Pharmaceutical Packaging**  
*Numerical diffusion simulation in thermoformed and cold formed blisters*  
Matthias Schellenberg, Suisse Technology Partners, Neuhausen am Rheinfall, Switzerland

**14:30**  
**Testing Solutions for perforated and breathable Films**  
*WVTR and OTR measurements for special applications*  
Doug Lindemann, MOCON Inc., Minneapolis, USA

**15:00**  
**Coffee Break**

**15:30**  
**Practical Applications of Gas Permeation Rate and Head Space Data for Product Shelf life**  
Prof. Ron Thomas, Clemson University, Clemson, USA

**16:00**  
**Organic Permeation**  
*Permeation of organic compounds such as flavor and aroma components, active ingredients, solvents, carries and more*  
Alan Shema, MOCON Inc., Minneapolis, USA

**16:30**  
**Different Test Methods (WVTR High Barrier)**  
*Overview of methods to measure high water barriers used in applications like OLED or photovoltaics*  
Andreas Roos, MOCON GmbH, Neuwied, Germany

## SPEAKERS



**Franz Sturm**  
Managing Director  
MOCON GmbH, Neuwied, Germany



**Michelle Stevens**  
MOCON INC., Minneapolis, MN, USA



**Matthias Bösel**  
Innoform GmbH, Oldenburg, Germany



**Christoph Zerwas**  
Product Manager  
MOCON GmbH, Neuwied, Germany



**Andreas Roos**  
Product Manager  
MOCON GmbH, Neuwied, Germany



**Dr. Klaus Noller**  
Fraunhofer IVV, Freising, Germany



**Hans-Peter Wagner**  
Service Department Manager  
MOCON GmbH, Neuwied, Germany



**Matthias Schellenberg**  
Suisse Technology Partners,  
Neuhausen am Rheinfall, Switzerland



**Doug Lindemann**  
Vice President / General Manager  
Permeation Products & Services  
MOCON INC., Minneapolis, MN, USA



**Prof. Ron Thomas**  
Clemson University, Clemson, USA



**Alan Shema**  
Product Manager Consulting Testing Services  
MOCON INC., Minneapolis, MN, USA