



**Nederlandse Vereniging
van Verftechnici (NVVT)**



Invitation

for the symposium NVVT

Pigments & Fillers and yearly general meeting

The Dutch Association of Paint Technicians (NVVT) invites you for the symposium on:

Date	Tuesday 24 May 2022	
Location	't Veerhuis Vergadercentrum Nijemonde 4 3434 AZ NIEUWEGEIN	
Time	Start of the meeting	13.30 hrs.
	Start of the symposium	14.00 hrs.
	Closure	16.40 hrs.

Program

12:30 hrs. **Reception and registration with lunch**

13:30 hrs. **Opening by André van Linden – chairman NVVT**
JAARLIJKE ALGEMENE LEDENVERGADERING (in Dutch)
Agenda volgt nog.

SYMPOSIUM (in English)

14:00 hrs. **Elementis-Talcs for Sustainable coating solutions**

Veli Kilpelainen (Elementis)

Our target at Elementis is to reduce our impact on the planet. Our sustainability targets is to reduce Green House Gas (GHG), to improve Energy Efficiency, to reduce Waste production and to reduce Water Consumption. Sustainability profile of our talc products consist of low carbon foot print operations, high performing products that prolong the life time of coatings and safe use of our products. Last year (2021) we reduced the carbon footprint in our mining and production operations by 72 % by changing to certified renewable electricity source. Elementis was awarded with Ecovadis Gold rating in 2021. Elementis takes part of many social programs whose target is to improve sustainability in many different angles (CDP, FTSE4Good, UN Global Compact, Water Stewardship, Kaivosvastuu).

Talc as natural, inert and non-toxic material with lamellar and hydrophobic particles is economical and safe choice for many decorative and protective coatings. This presentation demonstrates how Elementis talc grades improve durability of different paint applications and so improve the sustainability of coating products. Solution to reduce TiO₂ in paints by safe and efficient new talc grade is also demonstrated.

14:30 hrs. **Hansen Parameters of TiO₂ Pigments**

Elisa Kersten (Kronos)

Since 1916 KRONOS produces excellent TiO₂ pigments for different applications. For matrix adoption in application, TiO₂ pigments carry a surface treatment that fits to the different components of the application system. A Hansen Solubility Parameters (HSP) approach to describing the properties of the pigment surfaces provides answers based on the disperse interaction potential, polar interaction potential and hydrogen bonding, thus providing a direct link to the possible interactions between particles and matrix components. Besides many options to optimize application recipes, it can probably be used for pigment design as well.

For the HSP measurements used in this work, LUMiSizer setups were used together with 2 mm cuvettes. Eight pigment samples were selected in pairs according to the applications - multipurpose, plastic, food and ink. The Integral Extinction results of the LUMiSizer were transformed to relative sedimentation times and subsequently analyzed by using HSPiP software. This HSP workflow and the results will be presented.

15:00 hrs. Break

15:30 hrs. New applications for effect pigments based on UTP technology, the ZTS (ZENEXO® Ternary System)

Frank Maile (Schlenk)

New pigment technology using ultra-thin aluminium substrates can be used to produce highly opaque, chromatic effect coatings based on solvent- and waterborne, powder and UV technology. The talk will review the Ultra-thin pigment technology (UTP) and present the products commercially available at this point in time.

With the individual effect pigments based on UTP it is possible to realize color shades that were previously only known from (semi-) precious metals. Thanks to the outstanding hiding power introduced by the UTP pigments in the paint layer, stylings with high lightness and color travel can be realized mixing UTP pigments with transparent organic pigments.

16:00 hrs. RheoLight™ Dynamic Light Pigments - combining a new color dimension with enhanced visibility for humans and machines

Paul Mijnen (Rheolight)

Ink Invent is the developer and manufacturer of a new class of effect pigments, namely Dynamic Light Pigments. RheoLight™ as the first product group within this effect pigment class, has two distinctive features. The new way of how RheoLight plays with incident light adds a new color dimension to the existing color design palette. This creates a range of new possibilities for color, effect and product design. With more depth and an unexpected visual effect, objects that have had RheoLight color applied maintain a high-end appearance.

Increased visibility of objects with RheoLight, for example, is important for man and machine to gain a better understanding of both traffic participants and vehicles as well as the traffic environment in conditions of poor visibility such as dusk, evening and night. This visibility enhancement also applies to LiDAR, (Light Detection and Ranging), which is used in ADAS (advanced driver assistance systems) and AV (autonomous vehicles). With this improved visibility, LiDAR laser measurements and subsequent computer decisions become significantly more reliable. RheoLight, as an effect pigment, is easy to add to existing paint and coating systems and provides much development space for optimization of the RheoLight Effect for the desired application. With the presentation, the RheoLight product family will be further elaborated and an overview will be given of the possibilities and applications of this new color effect.

16:40 hrs. Closure with appetizers and drinks

Registration fees

	Visit 1 'study day'
Members NVVT	free
Non Members	€ 60,-
Retired and students	€ 30,-

Registration

If you are interested to attend this symposium, please register your attendance at

www.vvfv.nl/kalender

Your registration will be confirmed automatically. A week before the event you will receive the confirmation with the ultimate details. In case you do not receive this latter confirmation, please send an email to event@vvfv.nl.

Registrations are to be made at the latest 16 May 2022

Upcoming symposia NVVT

12/14-07 2022	ETCC Krakow
20-09-2022	Highlights ETCC Krakow 12-14 July
22-11-2022	Binders

**The board of the NVVT is looking forward to meeting you
on 24 May 2022**

Board of the NVVT

André van Linden (Chairman)
Wil van Meer (Secretary)
Dirk Klomp (Treasurer)
Jaap Akkerman

Martin Bloem
Michel la Faille
Anil Laurent
Sander van Loon