Nederlandse Vereniging van Verftechnici (NVVT)

Invitation Symposium

ALV and ECS Highlights

The Dutch Association of Paint Technicians invites you for the Symposium at:

Date:	Location	Time	
Tuesday	't Veerhuis vergadercentrum	Start of symposium:	13:30 hrs
23-5-2023	Nijemonde 4, 3434 AZ Nieuwegein	Closure:	17:00 hrs

23-mei-23

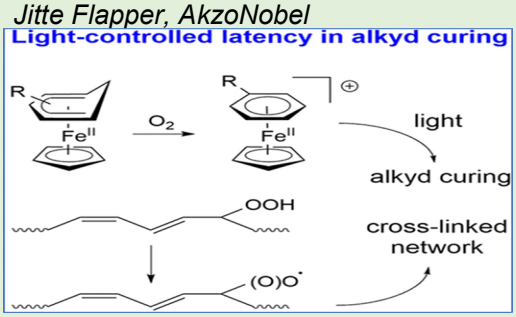
12:30 **Reception and registration with lunch**

13:30 **Opening by A. van Linden - Chairman NVVT**
JAARLIJKSE ALGEMENE LEDENVERGADERING (in Dutch)

14:00 **Water-borne one-component self-crosslinking polymer dispersions with high chemical resistance properties meeting Ikea R2** *Dirk Mestach, Allnex*

Increasing concerns about the sustainability of solventborne coatings, combined with a growing awareness of all factors contributing to the carbon footprint related to the coating of furniture, is causing a demand for one-component coating systems curing at low temperature conditions without concessions to the performance of the coating systemIndustry standards that are commonly used in furniture coatings are DIN 68861 and the IKEA IOS MAT 0066, are challenging for a 1K WB acrylic system to achieve. Especially the resistance against coffee and 48% ethanol required in the IKEA IOS MAT 0066, are hard to reach for a low gloss one-component water-borne acrylic paint.
By using a combination of crosslinking chemistries and particle morphology, a novel WB acrylic resin can be developed with superior resistance to both coffee and ethanol. These novel binders have significantly increased crosslink density that allowed us to formulate pigmented matt coatings that comply with the IKEA R2 standard.
Furthermore it will also be shown that these resins can be formulated with a high bio-based carbon content above 30% without diminishing the final performance properties.

14:30 **A new Iron-based, light-activated alkyd drier**
Jitte Flapper, AkzoNobel



As a result of (expected) relabeling of cobalt-based materials, cobalt-free alkyd driers (based on iron or manganese) have been developed. Although these new driers perform similar to cobalt in many aspects, particularly hardness development is less. As anti-skinning agent, oximes like methyl ethyl ketoxime (MEKO) or 2-pentanone oxime (2-PO) are commonly used, but their use is also under legislative pressure.

We will present a new alkyd drier which could potentially overcome the legislative and performance challenges described above. This drier is based on an abundant and environmentally benign metal (iron) and does not require an anti-skinning agent. Oxidation of the complex CpFe(cyclohexadienyl) (Cp = cyclopentadienyl) yields the cationic CpFe(benzene), which is converted to the active alkyd drier after exposure to (visible) light. The complex is the first example of a cobalt-free alkyd drier that matches the performance of cobalt-based driers not only in drying speed, but also in hardness development. As the complex is only active in the light, no anti-skinning agent is required to suppress drying activity upon storage (as no light penetrates the paint can).

15:00 Break

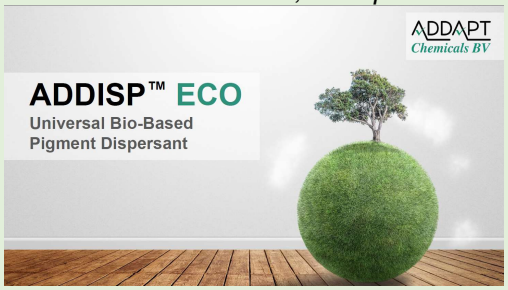
15:30 **The role of paints and coatings in a sustainable future**

Wijnand Bruinsma, AkzoNobel

At AkzoNobel, we've made it our business to deliver the sustainable and innovate solutions that our customers, communities – and the planet – are increasingly relying on. We're fully focused on ensuring that the pioneering paints and coatings we supply today can help to safeguard our world far beyond tomorrow.
We've set ambitious 2030 targets:
-50% carbon reduction in our own operations and across our value chain
->50% revenue from sustainable solutions
-100% circular waste in our own operations
->100.000 members of local communities empowered with new skills.
Paints and coatings matter because they not only beautify, but also protect substrates for a long period of time, therefore contributing to the reduction of virgin materials and the frequency of repairs and replacements. A sustainable future requires us to collaborate with customers, suppliers, academia, and other stakeholders. It's about pushing boundaries and finding inventive ways to collectively make a positive contribution to an ever-changing world.

16:00 **Universal biobased pigment dispersant – ADDISP™ ECO**

Willem van Gerresheim, Addapt Chemicals



Due to legislative issues and strong consumer demand, now often there is an increasing tendency towards raw materials from renewable, bio-based origin, amongst other, pigment dispersants. Part of this, is the approach for reactive systems giving (some) additional contribution to durability.
Much has been published about stabilization mechanisms of pigment dispersants and many approaches are described for resin free pigment pastes for Solvent Based; Water Based and UV-curable coating and ink systems.
This article shows a novel approach using the newly developed ADDISP™ ECO - a reactive, VOC-free, bio-based (biodegradable) pigment dispersant for, amongst other, resin free pigment pastes, applicable in Solvent Based; Water Based and UV-curable systems. This dispersant enables production of resin free pigment pastes with "fineness" <5 µm using dissolver only, no ball/pearl mill required.
The ADDISP™ ECO can also be used in applications wherein resins are used as a component e.g. paints and inks.
Results are shown for a variety of "difficult to master" pigments including carbon black(s) with one, single pigment dispersant.

16:30 Bio-MPA: The missing link for renewable coating resins

Roger Blokland, Relement

Coatings are needed everywhere and always, but coatings are not 100% sustainable. At end-of-life coatings become waste & releases
CO2, since recycling is very difficult. Therefore bio-based coatings are necessary, and this is a #1 priority for many coating companies. The problem is a specific ingredient (aromatic) which is a bottleneck. Up to now these are only fossil based. Now finally a bio-based replacement can enter the market. Relement has developed technology for an unique renewable solution to replace fossil based PA (Phthalic anhydride) which is called bio-MPA (3-methylphthalic anhydride). bio-MPA is made out of furfural. Furthermore, the platform technolofy can provide other aromatics as well, such as HHPA (hexahydrophthalic anhydride). Bio-MPA can be a gamechanger in the coatingssector, since it is a first of kind that actually is a near-drop-in solution for fossil PA.

17:00 Closure with appetizers and drinks

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Symposium Information

Registration fees

	visit 1 symposium
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.vvvf.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 cofirmation, please send an email to **event@vvvf.nl**.

Registrations are to be made at the latest 16-mei-2023

Upcoming symposia NVVT

23-05-2023	ALV and ECS Highlights
19-09-2023	New Developments & Insides
21-11-2023	Binders

The board of the NVVT is looking forward to meeting you on 23-mei-23

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