

Manufacturers

Working Together for Safer Colorants

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Mission statement

The purposes of the association are the following:

To coordinate and unify the efforts of manufacturers of synthetic organic colorants to minimize possible impacts of these products on health and the environment.

To achieve these ends by the most economic means without reducing the level of protection of health and the environment.

To encourage harmonization of health and environmental regulations in key geographical areas.

To represent the positions and interests of the manufacturers of organic colorants towards authorities, public institutions and media.

To promote responsible environmental and health risk management during manufacture, transport, use and disposal.

To enhance the recognition of the commitment of ETAD members to responsible behavior with respect to health and the environment.

Preface from the president



Mr. Ravi Kapoor (Heubach Colour Pvt. Ltd.) Friends from and of ETAD,

I do not want to start by saying that this is my last foreword - too morbid - but in fact that is the case. After eight years as Board member and four years as President of an intensive and event-filled period, this fulfilling time has to come to an end. At least for me it was an enriching experience and one that allowed me to make a difference or at least try to, and for that I am grateful. Each President, and I had a chance to associate with the last two, has their own perspective and modus operandi, of course within the philosophy of ETAD's principles. One clear approach was to look from the angle of the western world and the other from the Asian perspective. Much has been said and written on the migration from the west to east of the pigment and dye manufacturing (and later use) during the last 25-30 years, and I would not like to repeat this. However I do believe that I brought the Asian perspective on the table but, coming from an Indo-German approach, Heubach India also follows in the track of Heubach's 200 year old history in pigments in Europe.

How was this journey during the last 8 years of active One more area to address was the fact that the new producer association with ETAD? force in India and China, independently from the company size,

Initially the acceptance of new ideas was slow as to be expected and later far higher. The last few years have showed a complete integration of the old and the new point of view and this has now resulted in one approach which is the legacy (maybe this is too pompous a word) I would like to leave behind. To the full credit of all in ETAD the doors in the people's minds were open and embraced the new ideas with full gusto; I would like to specially thank the past Presidents and Walther as well as all of you, who were pivotal in pushing our new initiatives. Allow me to take you down the road of some of these projects which were and, I believe, are still significant though not all were as successful as we would have liked.

One big area of concern was the low membership base of ETAD, which was not only small but also skewed: only the conventional big western companies were active, making it an "exclusive club", with a European domination which left a big hole to be filled by the the large and medium Asian companies. Two initiatives were launched to address this aspect, the first being the reactivation of the Indian Operating Committee (IOC) with a new injection of adrenaline, and the second the systematic push of the Japanese Operating Committee (JOC). Both these ventures were very successful and fresh inputs from the Indian and Japanese diaspora were soon seen and felt thanks to the growing participation from both countries.

On the other hand, the parallel foray into China had mixed results, with good initial success and, later, due to the withdrawal of key members of the Chinese Operating Committee (ChOC), a premature demise in the activities. This only confirmed the fact that for every regional organization to succeed there is a need for committed individuals as the key to success.

has a quite similar mind-set when it comes to an association like ETAD. In short our membership drive was getting affected by their reluctance to fork out what they considered the steep ETAD membership fees. A proposal was discussed and accepted by the Board to initiate a new membership category called "Associate Member". This required lower fees and had some restrictions on the access to information in comparison to regular members. Despite best efforts this project did not quite take off, as the target companies seemed to want full access to information but pay a lower fee, else, in their opinion, it seemed to be a case of buying a packed tutti-frutti cake which when opened was without the cream, nuts and fruits. One not so good story. Here the new President has his task cut out to figure alternate strategies.

The other and, I believe, significant initiative was the proposal and acceptance by the Board of the Environmental Sustainability Committee, which addresses the environmental and ecological concerns affecting the colorant industry. This topic was taken for granted as a normal full compliance issue by the western and the Japanese companies but needed to be addressed in the Chinese and Indian context, not to mention the new geographies of the future. One role envisaged for ETAD was to bridge the understanding gap, attitude and corporate philosophy between the west and the east in all matters relating to sustainable production of pigments and dyes. The ESC is mainly functioning in the Indian subcontinent at present but the vision is to take this to China and other countries as well. In India a number of projects have been undertaken, with the last one done beginning of 2015 with the sponsorship of a European consultant and the aim of disseminating the waste management technologies for the benefit of the Indian colorant industry. All these initiatives were always coupled with the Responsible Care principles ETAD is committed to.



In the meanwhile efforts have been rekindled to restart the ChOC, which is a critical step, and I am happy to report that with the keen efforts of Walther and our new addition Gecheng we are smelling success again. These efforts will be continued till we have a vibrant ChOC, without which ETAD would be incomplete. Another positive development is the increased participation of the Taiwanese companies, which is a very good trend given the slew of new REACH-like regulations being implemented by many Eastern countries like Taiwan, Korea, China and so on.

So not to repeat the important achievements of the POC, the DOC and the RAC, as these will be highlighted in their reports, I will not go into the details. However I would like to formally thank all the chairmen of these committees, who over the years have rendered self-less, highly qualified and extremely competent service to ETAD and its member companies in the increasingly complex regulatory world we are living in. Of special mention is the work done by ETAD on various issues like the PAAs limit, the nano issue, the ZDHC group and many other complex issues. Of special significance from the Indian perspective is the inroad made into the Bureau of Indian Standards, which has proved to be difficult in the past. I am happy to report that the standard IS9833, recommended by ETAD, has been accepted. We are also hoping to work with BIS on other standards related to textiles, paints and intermediates used by dyes and pigment industries.

I would also like to thank all those of you who will be attending the 41st General Assembly in Goa, India as well as those who tried but could not make it, as this was one of the symbolic goals that I had to fulfill before my term ended – to get one GA done in India. The significance went beyond this being merely convenient for us Indians, to being a symbol of the inclusive integration of ETAD as it is today. Not that this would be a punishment as Goa is full of fun, sun, beach and feni (check the meaning of feni).

Finally I would like to bid goodbye to all friends in ETAD with only one message, and that is to foster inclusive growth, get all geographies in the world involved and share knowledge with all relating to sustainable practices, as this is what we owe to the world we live in and where we are sometimes perceived as threats to the ecology and safety. This world cannot live without our colours and we cannot live without this world, so there is a karmic connection which we need to honor, not only for our generation but also for the future generations.

I would like to welcome the new proposed President, Detlef, and in this case I cannot say that he will fill my shoes adequately- he will need new shoes as he is a wee bit larger than I. In him we have a person who I believe will more than do justice to the legacy of the past Presidents, who all have done a great job. I wish him all the very best as also to my good friend Walther, who is the pillar in ETAD, to Pierfrancesco and to our wonderful members of the ETAD secretariat.

From the **Executive Director**



Dr. Walther Hofheri

ETAD's success as a global organization depends not only on its functioning as a project-oriented association but also on the involvement of the regional operating committees and their cooperation with local chemical associations, as we see it in Japan, India and the US. Member companies allocate significant resourses to committee work and task force experts, whose dedicated work and expertise is crucial for ETAD's achievements. Thanks to all who, also this year, have contributed to the benefit of ETAD.

Undoubtedly in 2014 we were very active in Asia. In April I gave a presentation about ETAD to members of the Chinese Dye Industry Association (CDIA) at their 30th founding anniversary; thanks to the presence of Dr. Gecheng Xie, on board here in the secretariat since March 2014, we had a much more effective interaction with Chinese companies. Additionally, in

October Dr. Xie had the first follow-up meeting with Mr. Tian, secretary General of CDIA, to explore options of further cooperation. One of the goals of these activities is the reanimation of ETAD's Chinese Operating Committee, a project strongly supported by our Board.

End of November ETAD participated at the Wastech seminar in Gandhinagar, Gujarat. At this event, top experts from around the world met to discuss waste management issues in India, and it was an opportunity for Mr. Michel Buser of Ecosign (Basel), ETAD's consultant, to give a presentation on critical issues in effluent treatment of colorants. In addition to this event ETAD's Indian Operating Committee (IOC), together with the Indian Chemical Council (ICC), held in the same week a seminar on effluent treatment, during which Mr. Buser also presented a half-day workshop on specific waste treatment issues. The workshop reflected in particular current topics the members of ETAD's Environmental Sustainability Committee (ESC) had addressed in their recent meetings.

Our attention to current developments in colorant-related topics also brought to the revision of ETAD's recommended limits for organic impurities in dyes, which were, for some substances, even lowered. This clearly enhances ETAD's value as an organization representing companies with high responsible care standards. Additionally, the revision is part of ETAD's Board vision for 2020: the goal to incorporate as many impurity limits for dyes as possible into ETAD's Code of Ethics, thus making the corresponding compliance mandatory for all ETAD members.

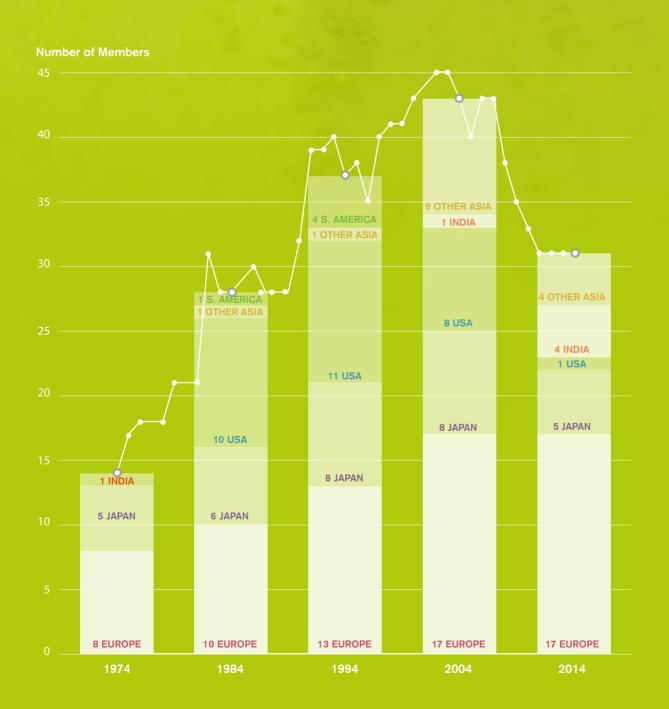
Since the Code of Ethics is a fundamental document for ETAD, its enforcement is also an important basic task of the secretariat, together with ETAD's Lawyer Dr. Hans-Rudolf Uebersax. For the first time in ETAD's history we received last year from a downstream user of dyes a complaint that an ETAD company had breached our Code of Ethics in the past. The Board and I took that allegation very seriously and investigated this case thoroughly. This case was a good opportunity to check in practice the enforcement of ETAD's Code of Ethics and to underline the importance of the commitment we expect from our member companies.

Last but not least my special thanks go to the Board members for their support and to the chairmen of the committees, who chair the meetings and write the contributions for this Annual Report.

Membership

There was no change in the membership during 2014.

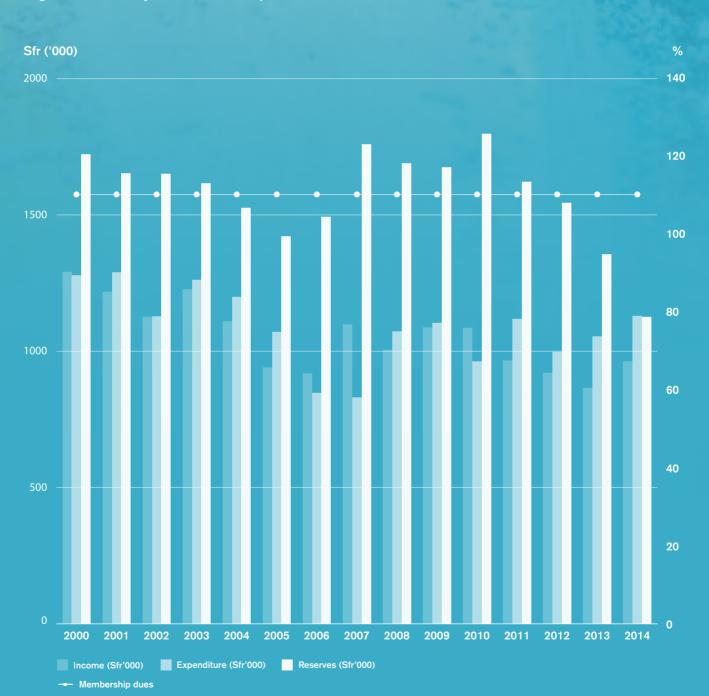
Fig. 1 – Growth and changing regional composition of the ETAD membership



Finance

ETAD is a non-profit association. The operating expenses are recovered mainly by means of payments by the ETAD members. In 2014, total income was SFr. 974'000 compared with total expenditure of SFr. 1'142'000, resulting in a loss of SFr. 168'000.

Fig. 2 - Summary of income / expenditure 2000 - 2014



General Assembly and joint meeting

40th Ordinary General Assembly

The 40th Ordinary General Assembly of ETAD was held in the Novotel Barcelona City on May 16th, 2014.

As opening remarks, the President Mr. Ravi Kapoor mentioned the recent price hike in the intermediates for the dyes manufacturing and the always increasing number of regulations worldwide, which companies have to follow closely in order to be able to continue their business. Focussing on pigments, regulatory issues are accompanied by the still widely debated nano topics, likely to be a lively object of discussion for quite a while.

Mr. Kapoor also underlined the privileged position ETAD has achieved in India. Thanks to the good communication with the local authorities, ETAD has not only become a resource on the safety of colorants, but has also been asked for advice on the "fitness" of other companies to meet modern standards of production and safety awareness.

In the closing part of his introduction, Mr. Kapoor mentioned the changes that occurred in ETAD's staff during the last year. He remembered the impressive contributions to ETAD's activities given by Dr. Simon Lawrence, who recently retired, and Dr. Akio Yoshida's very active participation in the Board. He also wished all the best to Ms. Diana Colombo, the former ETAD secretary, and welcomed Dr. Gecheng Xie as a very valuable addition to the Basel office team, not only because of his experience in pigments but also as a special help in seeking the contact with Chinese manufacturers. Finally, he thanked Dr. Walther Hofherr, Dr. Pierfrancesco Fois and Mr. Bertil Hanke for the organization and following of key activities and all their general background work.

Out of the ETAD membership of 31 companies at the time of the General Assembly, 19 were present or represented by proxy; of the total vote entitlement of 74 votes, 62 votes were represented at the meeting (84%). The participants approved unanimously the minutes of the 39th Ordinary General Assembly 2013 as well as the Annual Report 2013. Commenting on the Annual Report, the President summarized the corresponding activities which had characterized all committees during 2013.

The Treasurer Dr. Jahn presented the financial report for 2013, which had been sent in due advance to all member companies. In 2013, total income had been SFr. 866'000 compared with total expenditure of SFr. 1'055'000, resulting in a loss of SFr. 189'000. This financial report was approved unanimously.

As Dr. Jahn pointed out, a substantial loss was caused by the necessity for ETAD to draw from its reserves, with a consequent depreciation of the security units. Since the main cause for this problem was the untimely payment of membership fees, Dr. Jahn reminded to the member company representatives that ETAD's stability strongly depends on them. He also announced that the procedure for payment of fees will be changed to avoid similar cash-flow problems in the future. In particular, a shorter deadline for the payment (three months) will be introduced.

The Board proposal for the Budget 2014 and the appointment of PriceWaterhouseCoopers AG as auditors for the 2014 accounts were approved unanimously by the General Assembly. Mr. Kapoor presented to the Assembly the specific goals on which ETAD would focus particularly in 2014. The active recruitment of potential new members in Eastern countries would be pursued with the additional help of the new ETAD staff member Dr. Xie. Sensitive applications for pigments and more stringent textile standards for dyes would be the focus of the sector committees. The ESC would continue its activity on sharing and assessing current effluent treatment practices.

The ongoing changes in regulations and standards also would be reflected in the further update of impurity-related chapters (heavy metals, organic impurities) in the ETAD Guidance.

In his closing remarks Mr. Kapoor reminded the members of the sometimes underestimated role of the Product Safety experts, and of the importance of ETAD in allowing their crucial know-how to be shared, updated and implemented back in the companies. He thanked all the committee members for their good work and used the occasion to thank especially Dr. Peter Simmendinger, who would retire from the POC after the fall meeting, for his contributions as committee member as well as chairman.

As is customary, the Board proposal for its composition for 2014/2015 was presented to the Assembly. There were no additional nominations in response to the invitation by ETAD Legal Counsel, Dr. Uebersax. The Board was elected unanimously as follows:

Mr. Ravi Kapoor Heubach Colour Pvt. Ltd. **Dr. Clemens Grund DyStar Colours Distribution GmbH** Dr. Reiner Jahn **BASF Schweiz AG**

Mr. Peter Krummeck Sun Chemical A/S Mr. Detlef Fischer **BEZEMA AG**

Mr. Georg Roentgen **Huntsman Textile Effects** Dr. Mehmet Emre Sener Setaş Kimya Sanayi A.Ş.

Dr. Takanori Sannan Dainichiseika Color & Chemicals Mfg. Dr. Rüdiger Walz Clariant Produkte (Deutschland) GmbH **President** Vice president **Treasurer**

Joint meeting of ETAD Board, DOC, **POC and RAC members**

The ETAD joint meeting makes it possible for the different committee members and the Board to gain a deeper insight into each other's activities and discuss topics of common interest.

Prior to the joint meeting Board members take part in the morning sessions of the specific committee meetings and have a first-hand experience of the committees' work and approach to colorant issues. Additionally, they can provide directly their comments to the committee members on crucial topics which strongly affect the colorant manufacturing industry.

The joint meeting focused on three main items:

- Impact of ETAD's new impurity limits on the Code of Ethics
- Periodical audits of ETAD member companies
- Feedback from Board members of their visit during the morning committee meetings

Impact of ETAD's new impurity limits on the Code of Ethics

The recent ETAD activities in the ZDHC group started the discussion on updating ETAD limits for residual metals and organic impurities stemming from synthesis of dyes. ETAD members have to comply with the Code of Ethics limit of 0.1% (1000 ppm) amines for azo dyes potentially cleaving to carcinogenic aromatic amines, whereas the limit agreed upon in the Manufacturers Restricted Substance List from the ZDHC group is 200 ppm. Since the lower limit in the MRSL had been agreed upon in collaboration with ETAD companies, it was discussed whether also the Code of Ethics limits should be lowered to the same value.

A proposed modification was to have all ETAD impurity levels for dyes (currently listed in a specific recommendation) transferred into the Code of Ethics and made mandatory for all the products. Taking into consideration the feedback received by the committees, the Board proposed that all impurities of the ETAD recommendation list, including the lowered amines limit, become part of the Code of Ethics by 2020. This will be an ongoing project, strongly linked to individual company efforts to bring all their products into compliance with this ambitious proposal.

Periodical self-declarations of ETAD member companies

Dr. Hofherr presented the new self-declaration framework which ETAD will use starting in 2015. Questionnaires will be sent every five years to the companies to check their responsible care performance. The areas to be covered in the new questionnaire are based on the entrance questionnaire for new members, but will also cover the updated ETAD limits. In detail, the following sections will be covered:

- Certifications
- Environment
- Medical care
- Dangerous substances in use
- Occupational health and safety
- Compliance with regulations
- Raw material management
- Subcontractors
- Impurities in colorants

Feedback from Board members of their visit in the committee meetings

Mr. Kapoor underlined in his feedback the importance of the committees as a unique opportunity for the companies to compare their sometimes quite different positions and be able to work toward solutions acceptable to all the participants.

Dr. Grund, who participated in the RAC, drew the attention to the following points:

- The valuable work of the committee in evaluating in detail the effective impact of regulations on the colorant business;
- The crucial contribution of all ETAD members to the definition of acceptable limits for aromatic impurities in colorants; in particular he acknowledged the key role played by ETAD (and TEGEWA) in the creation of the Manufacturers Restricted Substance List of the ZDHC group;
- Further on the MRSL, he remarked that the list is to be applied both to dyes and pigments, which might bring new issues to pigments manufacturers.

Dr. Jahn, who participated in the POC, remarked that one of the main benefits of ETAD is to bring companies together to decide on common issues. The most recent example had been the collaboration on responding to the publication of a debatable document on alternatives to chromium-based pigments, where ETAD had been able to communicate the general concerns with a single, stronger voice.

Mr. Hori underlined the role of ETAD and its committees in allowing a constant information flow between companies worldwide, which allows them to be timely updated on relevant regulatory developments affecting their products.

The chairmen of the sector committees were also invited to report from their meetings.

Dr. Fois, who had substituted for Mr. Dohmen as chairman of the DOC for this session, underlined the current main issue of the DOC: the multiplication of initiatives and standards to which the committee members have to react. ZDHC had obviously the most weight at the moment. In general, Dr. Fois remarked how issues are more and more global, due to the always stronger connections between authorities and the internationality of companies and markets.

From the POC, Dr. Simmendinger reported the very important result of the agreement to go forward with the inhalation study for pigments. The important investment for the companies is expected to result in a valuable weapon in the advocacy work of ETAD for pigments as safe nanomaterials.

Mr. Kapoor concluded the session with a few words on the developments of the ESC, which is starting its first projects. He explained that the committee is an important tool for ETAD in its communication with Indian authorities. ETAD has reached a privileged status in India, which is a trump in such a bureaucratic land, and should try to use its influence to assist the implementation of better manufacturing practices.

Dyes Operating Committee (DOC)

Extractable cobalt in complex dyes

In 2014 the DOC initiated a project on the development of a method for the determination of extractable cobalt. The lack of such method presented a difficulty in the compliance with REACH, due to the inclusion of several cobalt(II) compounds into the list of Substances of Very High Concern (SVHC), with corresponding restriction. The goal of the ETAD project was to be able not only to quantify the extractable Co in complex dyes, but also to ascertain whether the element is present as Co(II) or Co(III). The important conclusion is that Co(II) and Co(III) can be quantified by polarography but it cannot be distinguished between them.

Keml

An important and eventful collaboration with authorities took place in the framework of a new project on the risk of hazardous chemicals in textiles, started by the Swedish Chemical Agency (Keml). The Agency contacted ETAD asking for data on the hazard classification of textile dyes actually on the market, as well as on dyeing process parameters relevant to environmental release. The DOC members provided updated information, which was summarized by the ETAD office and forwarded, along with corresponding reference documents, to Keml. The two associations TEGEWA and Euratex also took part in the project, and revised together with ETAD the final report. Unfortunately, all three associations found the conclusions reached by Keml highly debatable, and the described picture of the dyes-manufacturing and textile industry not at all representative of the current quality and safety standards. This concern was also presented to the Competent Authorities for REACH and CLP (CARACAL) and to the EU Commission Expert Group for Textile Names and Labelling.

BfR recommendation IX

Based on the information received from the Regulatory Affairs Committee changes in legislative landscape were screened, and the DOC evaluated on a case-by-case basis the need for ETAD to respond. From this point of view, the revision of the BfR recommendation IX was of particular relevance in 2014. The Recommendation is considered a general reference well outside of Germany, and the very first feedback provided by the DOC was the necessity to keep it as a piece of legislation. Additionally, the committee members provided their dye-related opinion on which changes could be done to the text in order to have an updated representation of the current knowledge on eco/toxicology and safety of colorants. The DOC input, as part of the consolidated ETAD's feedback, was communicated to BfR.

Recommendation on impurities in dyes

After the publication of its first recommendation ETAD and its member companies were deeply involved in the creation of the ZDHC Manufacturer Restricted Substance List (MRSL, see corresponding section below). In order to reflect this collaboration the recommendation on dyes impurities was updated. The member companies challenged the former list by incorporating the newest improvements and underlining the high purity level of their products. Thereby the threshold limits could be lowered and further parameters were included.

In 2014 the DOC addressed in particular issues related to the impurity profile of dyes. Both nationally and globally there is a growing attention to the presence of unwanted substances in dyes; it is an important task for the DOC to clarify whether existing and new concerns correspond to an effective risk for human health and the environment, and to propose adequate solutions in collaboration with other associations, authorities and standard issuers.

Non-regulated amines

The DOC initiated ETAD's contacting the Swiss Federal Food Safety and Veterinary Office to discuss their publication on non-regulated aromatic amines. The authors had investigated the presence in garments on the market of primary aromatic amines which are not regulated in textiles under REACH but could theoretically cleave from dyes. The DOC discussed the publication and concluded that, although the results seemed to show no risk for the consumers, the general issue needed to be addressed by ETAD in order to clarify the relevance of dyes actually on the market for the above-described issue. ETAD contacted the Swiss authorities and will organize a meeting with them, also joining efforts with the association TEGEWA. This is particularly valuable as the publication appears to have also drawn the attention of German authorities, and an agreement on a common approach based on the precise understanding of the issue is needed.

New Colour Index dyes committee

The Colour Index Executive Board (in which ETAD participates) was renamed Pigments and Solvent Dyes Technical Board, whereas a specific Dyes Committee was created. The DOC members discussed ETAD's possible participation in this new committee and concluded that it would be an important opportunity to further assure that the current status of dyes manufacturing is represented. Dr. Fois contacted the C.I. and proposed his candidacy for the C.I. Dyes Committee, which was accepted.

Activities in the ZDHC group

Also in 2014 retailers and brands were very important interacting parties for ETAD. The focus of the DOC was evidently on the Zero Discharge of Hazardous Chemicals group (ZDHC), where ETAD, as member of the Technical Advisory Committee (TAC) could voice the input of the member companies. The DOC feedback was particularly relevant as regards:

- first and foremost, the definition of the impurity limits for dyes in the MRSL. It was a quite delicate process in order to propose values which should be representative for high quality, maybe challenging in some cases, but not inachievable.
- the design of the allocation list for "smart testing". Since many impurities are now to be tested also directly on the chemicals, it is important that the corresponding testing is done in a sensible way. The DOC provided its experiencebased input on the so called "smart testing", thus achieving a reduction in the testing requirements to those parameters which represent the theoretically possible impurities only.
- finally, the DOC helped in the design of a standard basic reference text for a compliance statement of chemical suppliers with the ZDHC MRSL.

Pigments Operating Committee (POC)

REACH

ETAD continues to serve as a platform for lead registrants. In the year after the second tier submissions of dossiers the POC focused on transparent assessment and communication to authorities of nano properties of pigments. The status of the registrations was monitored and specific topics (e.g. particle size, particle size distribution, measurement method) were addressed in order to get a common industry position.

Nano debate

Nano continued to be one of the central topics of 2014. POC kept stressing a proactive concern-driven approach for the nano properties of pigments.

Despite the fact that no harmonised test methods are available to confirm officially the nano status of pigment according to the EU nano definition recommendation, available data suggest that most of the pigments should be considered as nanomaterial. An inhalation project was set up to further enhance the existing data set and prove that pigments are safe independently of their particle size. First results confirmed that no nano-specific toxicity can be found in organic pigments.

The findings were communicated to various authorities and associations to increase the awareness that pigments are safe and need no additional regulation. This important message was conveyed through all possible channels: direct communication, questionnaires, by participating in workshops and in answers to regulatory draft decisions on the basis of a common industry position.

In response to these efforts more and more authorities are considering an exclusion of pigments in their nano regulations (e.g. Belgium nano registry, Danish nano registry, German Printing Ink Ordinance) in contrast to the first national nano registry in France.

Sensitive applications

The use of pigments in sensitive applications provides an important challenge for the pigment manufacturers. Various applications (e.g. food contact, toys, cosmetics) request specific pigment profiles. In order to assess these profile properties ETAD initiated the development of general accepted test methods, with the ideal goal to transfer them into international standards (ISO).

Toy safety

Even though colorant-related toy safety standards in the EN 71 are already in force, ETAD continued its activities in the standard development to improve some remaining deficiencies. In particular the current test method for chromium (VI) has already been addressed as an item needing an official amendment. Additionally, the preparation of suitable reference materials for the existing methods is ongoing and needs specific input on representative combinations of elements and toy materials. Furthermore, due to the profound changes in the legal text and in the standards, the POC continued to work on the improvement of the corresponding communication to the downstream users.

Food contact legislation

Two application areas are currently regulated: application in plastics is regulated on an EU level by Commission Regulation (EU) No. 10/2011, whereas printing inks are regulated on a national basis. Both regulations ask for standardized test methods for the assessment of nonintentionally added substances (impurities). ETAD is developing, improving or establishing these test methods together with member companies.

In 2014 the major topics of the POC were pigments as nano particles and in sensitive applications as well as test methods for regulatory purposes.

Since pigments, to a degree depending on the regulation, are to be considered as potential nano materials, an inhalation project was started, whose first results already showed no significant difference between the toxicity of nano and non nano size. These results support ETAD's strategy of convincing authorities and NGOs that pigments should not be put in the same basket as new nanomaterials and subject to generic nano specific regulations.

For sensitive applications test methods were further developed, with particular focus on PCBs, PAAs and heavy metals. These methods will be new work items within the ISO standardization process.

In the context of Commission Regulation No. 10/2011 (also known as Plastics Implementation Measures or PIM) a guidance document was published to illustrate the reporting responsibilities within the supply chain. ETAD discussed with EuPIA (the European Printing Inks Association) how the 'adequate information' mentioned in the document could be provided to the downstream users. It was concluded that this information is part of the product specifications agreed upon between customer and supplier.

Also concerning plastics, BfR recommendation IX (Colorants for Plastics and other Polymers Used in Commodities) is a widely used recommendation for use of colorants in plastics and in similar applications. Its high relevance is due to the presence of an explicit colorant definition and to the fact that it is one of very few regulatory documents for pigments. Additionally it is a very important communication tool between pigment manufacturers and their downstream users. In 2014 BfR expressed its intention to either withdraw or significantly change the recommendation. ETAD collaborated with VDMI (the Association of the German Mineral Color Industry) to stress the importance of this document, and provided several update suggestions in direct communication to BfR concerning setting of limits and expanding the application beyond its current scope.

The German Printing Ink Ordinance, whose preparation work is still ongoing, had its 5th draft published in July 2014. In close collaboration with EuPIA and VDMI ETAD provided the input of the POC members to the various drafts of the ordinance. Currently, suitable colorants are listed in Table 1 of Annex 14 of the draft regulation, and a Table 2 was added to the Annex 14, listing pigments that were not fully evaluated. In agreement with the BfR ETAD defined a suitable process to "upgrade" colorants from Table 2 to Table 1 within the transition period and have them allowed for the application. ETAD is now testing the applicability of the proposed process.

Standardisation

The growing number of regulations requires solid definition of terms and test methods as important references to be used by the regulators. For this reason ETAD started its activities in the ISO technical committee TC 256 (pigments and extenders), participating in working group 1 for terms and defintions, working group 2 on functional pigments and working group 3 for general test methods.

A first success in 2014 was the standardisation of the term "colorant" in the ISO FDIS 18451-1. In addition the assessment method for PCBs (ETAD method 229) was filed as a new work item proposal.

Analytics

Only with robust methods, tailored to the pigments specific characteristics, it is possible to answer regulatory questions precisely. These methods are also very important as communication tool between customer and supplier, and their development is the main goal of ETAD's Analytical Expert Team. Ideally, finalized ETAD methods can be used as basis for international standards.

In 2014 ETAD's analytical team, composed of experts from the member companies, focused its work on the development, evaluation and refinement of various test methods for PCBs. PAAs and heavy metals.

Analytical Expert Team members

Dr. Martina Hirschen

Clariant Produkte (Deutschland) GmbH

Dr. Poul Møller

Sun Chemical A/S

Mr. Yukio Shinagawa

Dainichiseika Color & Chemicals Mfg. Co., Ltd.

Dr. Thomas Wagner

Heubach GmbH

Dr. Edith Wieser

BASF Schweiz AG

Regulatory Affairs Committee (RAC)

Description of the term "colorant"

"Colorant" is the generic term for "dyes" and "pigments". Due to the lack of a real uniform definition of the term "colorant" ETAD saw the necessity of having a clear reference. The unambiguous ETAD description of the term "colorant", first developed as an internal reference, has meanwhile been widely recognized. The core of the ETAD description was integrated into the ISO colorant definition in the standard ISO/FDIS 18451-1, which was finally approved in an ISO TC 256 meeting in September 2014.

GHS and REACH

The 5th revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) was released in September 2013. GHS continued to be an important discussion topic since, as a building block system, the full range does not have to be adopted. Countries are free to decide which of the building blocks will be applied in different parts of their systems.

This country specific implementation of varying GHS modules presents a challenge to industry because, as a consequence, classifications still can vary from country to country. Differing country-specific interpretations and implementation of GHS still result in the need for multiple data source information for GHS labels and safety data sheets. The RAC updated all ETAD member companies on any changes in the GHS status worldwide, whereas in 2014 particular attention was given to the developments in China and the US.

GHS had been fully implemented in China about 6 years ago, and remained as challenging because Chinese authorities are asking for additional testing of products already classified under GHS applying the conventional methods. In parallel, China SAWS, together with 9 additional ministries, issued in 2013 a draft Inventory of Hazardous Chemicals, i.e. the current Inventory of Hazardous Chemicals (2002 version) will be replaced. However in 2014 there still was no information available about when the revised inventory will be officially released. According to this draft inventory a chemical is regarded as a hazardous chemical if it is listed in the catalogue, or meets the definition described in the draft inventory. In addition the license for these hazardous chemicals may have to be renewed.

In the US, companies are working diligently on implementing GHS by the June 1st, 2015 deadline. That being said, to date not yet all US companies have fully integrated GHS SDSs and labels according to the new standard. Imposing a more prescriptive and formal process for hazard determination, assigning pictograms which may require new printers, and requiring a mandatory 16-sections SDS is challenging to quick progress. Additionally, since some companies have to bump up against the same or similar deadlines in other regions of the world, they are left with few dedicated resources.

REACH as well continued to be an important discussion topic. Meanwhile the third REACH phase is under way with deadline May 2018 for filing the registration dossiers for substances with volumes of 1 - 100 t.

At the same time registrants had to deal with an increasing number of draft decisions and additional requests from ECHA on dossier contents for substances from phase 1 (> 1000 t) and phase 2 (100 - 1000 t) focusing on identification and characterization as well as sameness of UVCB substances. The RAC's role here was to offer a platform were common issues could be discussed and appropriate strategies to minimize the industry burden agreed upon.

Additionally, 177 substances are included in the SVHC (Substances of Very High Concern) candidate list whereas Annex XIV contains 33 substances. RAC continued in assisting the ETAD Secretariat following requests from ECHA and other agencies for information on substances of concern and their possible use in colorant synthesis.

EN 71-7 Finger paints

The EN 71-7 only applies to finger paints and specifies requirements for the substances and materials used in this application. The revised version of the EN 71-7, supported by ETAD to a large extent, was published in April 2014.

The Regulatory Affairs Committee met three times in 2014.

RAC members maintained a flow of information ensuring awareness of emerging and changing global or national legislation together with its impact and interpretation. One of the most important aspects of RAC work is the exchange of ideas and analysis of common problems together with a crucial comparison of progress regarding developing legislation.

Guidance to the Code of Ethics

The ETAD Guidance Document is the crucial tool assisting member companies to comply with the Code of Ethics. Therefore it is essential that it reflects the latest developments in regulations and product safety.

Due to new released regulations, the ongoing update of the document turned out to be a complicate and time-consuming issue. Especially following the publication of the New Toys Safety Directive 2009/48/EC the section relating to heavy metals had to be revised to a large extent.

Meanwhile the update has been practically completed and the updated document will be released in 2015.

Nanomaterials

The EU Commission Recommendation on the definition of a nanomaterial, published in October 2011, is not yet approved by the member states and no overall unified measurement method has been defined and published to date.

The whole issue is a complex matter and discussions are still ongoing and far from being finalized; within this framework ETAD continued to monitor the practical impact of the definition and to propose feasible approaches for organic pigments.

During 2014 DG Enterprise and DG Environment came to a common view with regard to the consideration of nanomaterials in the REACH annexes and released a "non-paper" which was provided to industry. In this "non-paper" arguments by industry were considered, leading to a more promising approach. Although a significant change of the above mentioned definition is not expected, the potential impact, e.g. under REACH may be lowered. Additional requirements for low volume nanomaterials (Annex III) may for example not apply to phase-in substances (due to the date 2008) if not dangerous.

On a related topic, discussions to release an EU Nano register are still on-going.

The RAC kept following and communicating any new development by the above-mentioned regulatory activities, while discussing their potential impact on the daily business.

5th draft of the German Printing Ink Ordinance

The 5th draft of the German Printing Ink Ordinance was published in July 2014. In its structure the Ordinance is following the approach of the EU food contact legislation, which is in general unambiguously related to substances and not to products. Specifically, authorized colorants are listed by their Colour Index Numbers in Annex 14, Table 1 (positive list). In addition in Annex 14, Table 2, those colorants are listed, which are only permitted for a transition period of four years.

In principle, in order to transfer a colorant listed in Annex 14 from Table 2 to Table 1 an EFSA-like dossier has to be filed to the BfR - although the exact procedure of the submission of a dossier has not yet been communicated by the BfR. This issue was addressed in a meeting between ETAD and the BfR, and the RAC will assist the ETAD office in the determination of the precise information which should be provided by the companies in a dossier tailored to the specific application of colorants used in printing inks.

Revision of the BfR Recommendation IX

In the beginning of 2014 ETAD became aware of the BfR initiative to revise the BfR Recommendation IX, also taking into consideration a complete withdrawal. RAC, together with other ETAD committees, clearly expressed its concern on the possibility of a complete disappearing of the Recommendation, since it had meanwhile become a reference well outside of Germany. In a joint letter to the BfR, written in collaboration with the Association of the German Mineral Color Industry VdMI, ETAD reported the colorant industry's wish to assist by the revision process and proposed to take into account the Framework Regulation (EC) No 1935/2004, along with an update of the required impurity profile and corresponding limits. The revision is still ongoing.

ETAD North America (ETAD NA)

Regulatory developments in the **United States**

In 2014 ETAD NA monitored the following U.S. regulatory developments which were of particular interest to member companies:

- Legislative efforts to promote reform and improvement in chemicals management under the old Toxic Substances Control Act (TSCA). Separate bills introduced in the House and Senate were the subject of much debate during the year. With Republicans taking over control of both the House and Senate there is expectation that some compromise will be likely in 2015.
- Consideration by EPA to introduce further revisions to the Toxic Release Inventory reporting rule regarding source reduction.
- State legislative action in Vermont enacting a law for listing 66 chemicals of very high concern based on exposure, toxicity, and high risk to children's health. Two substance categories are dyes but are not expected to have immediate impact because neither has any commercial significance.
- Benzidine dyes screened using TSCA Work Plan methodology and omitted from 2014 EPA Action Plan chemicals because of low exposure. Benzidine congener dyes added to the benzidine dyes SNUR promulgated in the 1990's.

Regulatory developments in Canada

The Canadian government continued its subgrouping assessment of aromatic azo- and benzidine-based substances in order to set risk management priorities under Canada's Chemicals Management Plan. Favorable draft screening assessments were published separately on azo direct and azo reactive dyes, azo basic dyes and aromatic amines, and azo acid dyes. ETAD NA filed comments in support of the proposed conclusions for each.

As part of Canada's Domestic Substances List (DSL) inventory update, authorities are reviewing the Non Domestic Substances List (NDSL) to remove substances no longer meeting the listing criteria. Industry will have an opportunity to review and comment on the updated NDSL.

Canada was expected to finalize its GHS regulations by the end of the year with the aim, following a transition phase, to align with the June 1st, 2015 date when GHS regulations become mandatory in the U.S.

Authorities are working with their U.S. counterparts to align approaches for Significant New Use Rules (SNURs) and Significant New Activity (SNAc) rules. Enforcement of SNAcs will entail tracking to prove new use patterns are limited to trace quantities.

ETAD North America (ETAD NA) represents the global dves industry in North America. With its office in Washington, DC, ETAD NA is recognized by government agencies, industry groups and trade associations, customers, media, academic and research organizations, and the public as the authoritative voice of the industry. ETAD NA coordinates with the global ETAD office in Basel to serve the North American member companies by monitoring regulatory and industry developments, managing technical projects, facilitating networking opportunities, and disseminating information concerning the environmental, health and safety aspects of the North American dyes industry.

Chemical testing programs

ETAD NA continued to monitor developments in various governmental testing programs that could impact the North American dyes industry. In that regard, EPA decided to end the High Production Volume (HPV) chemical testing program following completion of all obligations through the third HPV test rule. EPA concluded the final reporting of data submitted for Leuco Sulfur Black 1 was satisfactory to comply with the test rule for the second group of HPV chemicals. No dyes were listed in the third HPV test rule.

There were no new developments in EPA's endocrine disruptor screening program to impact ETAD NA member companies.

ANSI voluntary sustainable textiles standard

ETAD NA continued to monitor developments under the ANSI Commercial Furnishings Fabric Sustainability Standard, which became effective in 2011, but there was no activity of interest to report.

Sustainable Apparel Coalition

ETAD NA monitored developments with this group of leading apparel and footwear brands, retailers, manufacturers, NGOs, and the EPA who are working together to reduce the environmental and social impact of apparel and footwear products sold around the world.

Zero Discharge of Hazardous Chemicals (ZDHC)

ETAD NA's Executive Director represented ETAD at the ZDHC meeting in New York City in September. North American members supported the global ETAD efforts to collaborate with ZDHC in developing the Manufacturers Restricted Substances List. A representative from one of the ZDHC member companies made a presentation at the November ETAD NA meeting.

Voluntary Product Environmenal Profile (VPEP)

In a joint effort coordinated by the American Apparel and Footwear Association (AAFA), the vendor TexBase completed the development of an electronic format of the Voluntary Product Environmental Profile (VPEP). VPEP is now active and in use by ETAD NA members to provide health and safety data on chemicals supplied to the U.S. textile industry. It may be accessed online at https://vpepexchange.com/.

Residual dyes in containers

ETAD NA continued its effort to seek revision to EPA's unrealistic default assumptions about the amount of residual dyes remaining in containers after use, which is an issue primarily under the new chemicals program. In support of this effort, members have collected and analyzed data from samples of residual dye in empty drums from customer facilities. The results demonstrated that actual residual concentrations are well below EPA's default values of 1% for powder and 3% for liquid dyes. A narrative summary and tables of data are being prepared for presentation to EPA.

Indian Operating Committee (IOC)

The key topics for the IOC during the year 2014-15 were the sustainability issues, in close collaboration with the ESC. The momentum built with the Bureau of Indian Standards (BIS) was also continued through participation in the different committees in the plastic, coating and textile areas.

Work with the Bureau of Indian Standards

The IOC continued its collaboration with the Bureau of Indian Standards (BIS) through the intensive presence of its members to crucial events and meeting. Mr. Sevak attended the Plastics committee (PCD12) in New Delhi in May 2014, where the main topics of discussion were the standards to be set for raw materials used in plastic manufacturing. As a particular urgent issue, the BIS requested all members to submit a report on the progress of elimination of lead from the raw material list. The IOC members confirmed that the present BIS list of "positive" pigments did not include any lead-containing pigments.

The BIS also formed a new committee (PCD 27) for test methods for Product Safety and Raw Material (RM), which in its first meeting in June 2014 defined its approach: all internationally accepted test methods and protocols relating to measurement of toxic substances will be proposed as committee methods, with the goal to arrive at a series of standard testing protocols recognized by BIS. The IOC will contribute as it has done in the past with the PCBs test method (ETAD 229). IOC will continue to participate in this very important committee and provide its vast experience of the sometimes different testing protocols across the world.

In March 2014 Mr. Sevak also attended the BIS committee meeting focused on paints applications (CHD20). Here the threshold of lead in decorative paints was the main topic of discussion. In principle there seems to be a consensus on a limit of 80 ppm for decorative paints, which is now incorporated in the BIS standards. However, the limit for lead in industrial paint is still under discussion. The IOC proposed a test method for paint and varnish (ISO 787) to be adopted under the dual standard list.

Dr. Rahman attended in September the meeting of the Dyes and Intermediate committee (PCD26). The goal of this meeting was to fix new standards and impurity limits for the intermediates used by the colorant industry. A list of the main manufacturers was requested by the BIS, with the description of current testing methods used by the companies, including, among other parameters, results repeatability. IOC's member companies provided detailed data, on whose basis identified issues will be discussed and proposals for fixation of new standards presented. The IOC will continue to work with this committee.

Additionally, in 2014 the IOC was present in the textile specialty chemicals and dyestuffs sectional committee (TXD 07), and will also attend future meetings.

Future planned activities

- Preparation of a recommendation under advice from the RAC for standards to be submitted to BIS for its acceptance and implementation across the industry;
- Acceptance of MRSL / ZDHC standards from all IOC member companies as general reference for compliance;
- Writing up of a white paper on test methods for hazardous chemicals: the pharmaceutical industry and the cosmetic industry are asking for reliable test methods and data for hazardous chemicals, and IOC could provide such a reference;
- Evaluation of Mr Kapoor's proposal that all IOC members should refer and adhere strictly to all ETAD's recommendations which are currently being incorporated by the RAC committee of ETAD into the ETAD Guidance.

Japanese Operating Committee (JOC)

The Japanese Operating Committee has been operating since its re-activation in 2010. The committee is formed by representatives of six ETAD member companies present in Japan. Based in Tokyo, we monitor the regulatory situation for pigments and dyes in Japan with active participation of members, and work in close communication with the ETAD office in Basel. A joint meeting with the Basel office has now become a yearly event. This year we had the committee meeting in Tokyo in September with the participation of ETAD's Executive Director Dr. Hofherr. On this occasion, he also held a seminar to JDICA (the Japan Dyestuff and Industrial Chemicals Association), which was very informative in terms of ecotoxicology and product safety both from a global and national perspective.

PCBs issue

It was a guiet year in 2014. The BAT value for PCBs in organic pigments was still not determined, with the interim upper limit of 50 ppm still being the current reference. The 7th hearing of two SME manufacturers by the BAT committee, and a hearing of JDICA by a MOE delegated institute were held in January 2014. Some JOC members participated as JDICA-WG member to this final hearing to the industries, after which, in March, a BAT Committee meeting was held behind closed doors, to which the JDICA secretariat took part. As reported, some committee members considered 50 ppm as appropriate for international consistency, while others saw the necessity of a stricter limit. The JOC members of the JDICA-WG discussed the measures to manage and control PCBs in organic pigments, in order to prevent products with a PCBs content over 50 ppm being marketed, and reported their conclusions to the authorities via JDICA. After that, the issue was suspended again due to internal changes in the METI staff. JDICA and some JOC members had a meeting with new and ex officers and explained the background and the current situation as well as all the efforts and activities of the industry on the issue. The JOC will continue its communication with the authorities and report back to the other ETAD members.

Nanomaterials regulatory situation

In Japan there are still no laws or ordinances which regulate nanomaterial directly. However, administrative guidance was provided to manufacturers, who introduced voluntary monitoring in order to guarantee workers and environmental safety.

The international project "Development of safety evaluation technology for nanomaterials", which was launched already in 2011 by the Ministry of Economy, Trade and Industry (METI), will end in 2015. The JOC is following this project closely and, during his visit to Japan, Dr. Hofherr and JOC members met with experts of the National Institute of Advanced Industrial Science and Technology (AIST) in order to exchange opinions, especially on the topics of suitable methods for the risk evaluation of nanomaterials.

Latest regulatory situation in Japan

In June 2014, a partial amendment to the Industrial Safety & Health Law (ISHL) was published. The amended ISHL expanded the scope of mandatory risk assessment obligations to 524 hazardous substances currently subject to SDS requirements only. The mandatory obligations are scheduled to go into force not later than June 2016 and, before this deadline, operational details are to be clarified by a ministerial ordinance. Along with the amendment, the Ministry of Health, Labour & Welfare (MHLW) planned to increase the number of substances subject to labeling requirement from 116 to 640 substances, which would increase the number of substances marked on package and make the package information difficult to read. To avoid such situation, MHLW is expected to set operational rules by incorporating best practices which will be proposed by the industry. JDICA and some JOC members had a meeting with the authorities to communicate to them in detail the industry's concerns.

Environmental Sustainability Committee (ESC)

This was an intensive year with a strong push towards the goals of ESC in India. The Indian Operating Committee was able to build good relations with Mr. P.K. Taneja, the new Additional Chief Secretary for Forests & Environment in the Indian Administrative Service, and along with the Indian Chemical Council (ICC) organized in October 2014 a brainstorming session to address environment and sustainability issues. This was a focused session with very strong attendance by senior management industry personnel; new technologies were discussed and ETAD offered to contribute towards efforts in improving sustainability by arranging for strong technical interaction in the near future.

Apart from this there was a fruitful interaction with the top Government officials: Mr. Hardik Shah, Member Secretary of the Gujarat Pollution Control Board had an intensive interaction with CEOs of top chemical companies, including colorant manufacturers, on issues which affect the sustainability of colorant industry today. The session with the new Environment Secretary was also very instrumental in establishing the credibility and the role of ETAD's ESC, which continues to grow in importance in India. The focus for 2015 will continue to be in these areas and a series of events have been planned in this regards.

The ESC met two times in 2014, once in January and once in November. During the January meeting many of the ETAD board members were present and, as a result of the very active participation, a short summary of the current relevant environmental issues for the colorant industry was prepared and sent to the ETAD secretariat, together with a series of clear questions needing answering. Upon evaluating the proposed topics, the ETAD secretariat along with the ESC members searched for an industry expert who could address the issues, and contacted Mr. Michel Buser, a specialist in waste management technologies practiced all over the world. The one day workshop "Waste Management in Chemical Industries - Challenges & Technology" was organized, where Mr. Michel Buser delivered a presentation covering all relevant technologies which can address the current challenges of the colorant industry. Additional presentations were made by other speakers and experts from the Indian industry.

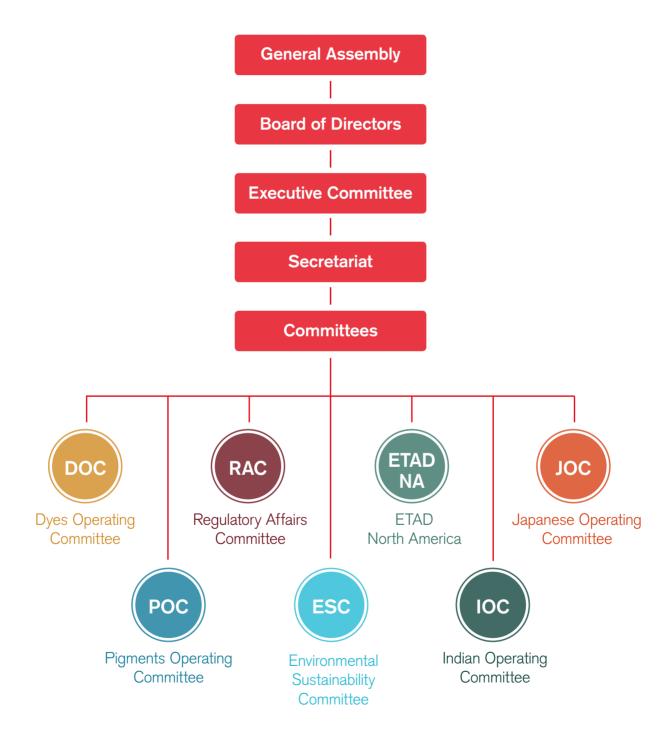
The program, jointly organized by the Baroda unit of the ICC with the strong support from ETAD's IOC, was attended by more than 40 participants and subject matter experts from industry. ETAD's President Mr. Ravi Kapoor, present at the event, mentioned during his address the acute necessity of having economic and viable technical solutions which are optimized to ensure that not only industry has an incentive to be responsible but can do this in the most economically viable manner.

Particularly appreciated was the interactive questions-andanswers session, as well as the valuable exchange of knowledge during the workshop. The proceedings of the workshop along with information on industry best practices will be compiled by ESC and made available for the benefit of the colorant industry.

A similar seminar was held in Ankleshwar for the benefit of the Ankleshwar Industrial Association, which has a large concentration on colorant manufacturers. Finally in Gandhinagar (Gujarat), Mr. Buser made a presentation during the very large and prestigious event "Wastech summit", which had a high powered panel including top officials of the Indian government.

ESC is also still working on the required information for the preparation of a Life-Cycle-Assessment for dyes and pigments, which would be beneficial especially for the member companies who have not yet started with such an exercise.

Organisation chart



Information and external activities

Position papers and comments

ETAD NA Comments on Draft Screening Assessments for Azo Disperse Dyes and Azo Solvent Dyes

Submitted to the Ministries of Environment and Health, Canada, in January 2014

ETAD NA Comments on Draft Screening Assessment Reports for Azo Direct and Azo Reactive Dyes

Submitted to Ministries of Environment and Health, Canada, in May 2014

ETAD recommendation for threshold limits on impurities in dyes (2014)

Published online in September 2014

ETAD NA Comments on Draft Screening Assessment Reports for Azo Basic Dyes and Aromatic Amines

Submitted to Ministries of Environment and Health, Canada, in September 2014

EURATEX, ETAD and TEGEWA - Common Position on the Swedish Chemical Agency Discussion Paper on exposure and risks associated with the use of hazardous substances in textiles

Submitted during the 16th CARACAL Meeting in November 2014

ETAD NA Comments on Draft Screening Assessment of Certain Azo Acid Dyes

Submitted to Ministries of Environment and Health, Canada, in December 2014

Presentations and publications

ETAD's objectives

Presentation to CDIA's meeting, Shanghai, China, April 2014

Organic pigments in the nano debate – ETAD's concerns Presentation to the Danish EPA, Copenhagen, Denmark, September 2014

Size doesn't matter, safety does - Organic pigments as traditional, well-known nanomaterials

Poster for the ECHA Topical Scientific Workshop on Risk Assessment of Nanomaterials, Helsinki, Finland, October 2014

Recent Development of European Regulation related to Colorants used in Food Packaging

Presentation at the Annual Meeting of China's Plastic Additives Association, Nanjing, China, October 2014

Overview of ETAD's activities on key issues

Presentation to JDICA, Tokyo, Japan, December 2014

ETAD Highlights

Bi-monthly information leaflet for ETAD members

ETAD's brochure

Overview on ETAD's structure, membership and current activities, regularly updated and distributed at external events

ETAD in the press

Standards for pigments in food grade plastics to be revised - ETAD ready to extent support to BIS in framing stringent standards in line with global norms for dyes and pigments industry

Business Standard, February 2014

Pollution laws leading to dyestuff price hikes Ecotextile News, April 2014

Textile bodies criticise KEMI report Ecotextile News, April 2014

India to publish positive list of pigments for food grade plastics

Chemical Watch, April 2014

ETAD concerned at "nonchalant" use of zero Ecotextile News, June 2014)

Sweden proposes SVHC labelling of textile -Industry strongly criticises the idea

Chemical Watch, November 2014

External activities

During 2014, ETAD continued or started activities in different projects with external groups and associations. The most relevant collaborations included:

- Participation in the final developments of the new Toys Standards EN 71, with focus on finger paints and elements content, as well as corresponding analytical methods
- Participation in the Zero Discharge of Hazardous Chemicals (ZDHC) group as representative of the colorants manufacturers
- Collaboration with the Canadian authorities on the class assessment of benzidine and azo dves
- Participation in ISO groups dealing with pigments standards
- Study on residual dyes in containers with the US EPA
- General input to the nano debate and corresponding national and international activities
- Information exchange with the Danish EPA on "nanopigments"
- Collaboration with the Japanese METI on the PCBs issue
- Collaboration with EuPIA and the German authorities on the topic of PAAs in napkins
- Participation to the Revision of the German Printing Ink Ordinance
- Collaboration with the German authorities on the revision of Recommendation IX
- Information exchange with the Swedish Keml for a study on chemicals in textiles
- First discussions with the Swiss authorities on non-regulated amines in dyes
- Participation in the Colour Index Pigments and Solvent Dyes Technical Board

Further information on the most relevant topics can be found in the single committees' reports.

Board

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Vice President

Dr. Clemens Grund DyStar Colours Distribution GmbH

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^{*} This list gives the staff composition as in March 2015

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^{**} These lists give membership as in March 2015

Code of Ethics **Preamble** The aim of ETAD is to minimize possible negative effects on health and the environment arising from manufacture and use of synthetic organic colorants and to ensure information on the best practicable protection is provided to the purchasers of these products. To achieve this goal and to promote the image of a responsible and safety minded manufacturing industry, it is necessary that in all aspects related to human and environmental safety, members be encouraged to adhere worldwide to a high ethical standard. Therefore, at the proposal of the Board, the General Assembly of ETAD approves this Code of Ethics as a key policy of the Association. All ETAD member companies are obliged to comply with this Code of Ethics. 1. Principles of responsible care ETAD members are committed to support a continuing effort to improve the industry's responsible management of synthetic organic colorants. Members shall develop, produce and distribute products in a responsible manner which protects human health and the environment from unacceptable risks during manufacture, transport, use and disposal. Specifically, members shall implement a responsible care program in which the member undertakes to manage its business in accordance with the following principles: synthetic organic colorants and its manufacturing operations; products and processes;

- To recognize and respond to any community concerns about
- To produce only synthetic organic colorants that can be manufactured, transported, used and disposed of safely;
- To make health, safety, employee training, quality assurance and environmental considerations a priority in planning for all
- To provide employees, distributors and customers information on the health or environmental effects of synthetic organic colorants and recommend appropriate protective measures to ensure their safe use, transportation and disposal;
- To operate all facilities in a manner that protects the environment and the health and safety of employees and the public;

- To promote research on the health, safety and environmental effects of its products, processes and waste materials;
- To cooperate with public authorities in establishing wellfounded environmental, safety and health regulations; and
- To promote these principles of responsible care to others who produce, handle, use, transport or dispose of synthetic organic colorants.

The responsible care program shall fulfil, but not be limited to, the specific obligations described under paragraphs 2-5 below.

2. Product Safety Policy

It is the policy of ETAD members to take all reasonably practicable steps in order to ensure human and environmental safety in the use of the dyestuffs and organic pigments (synthetic organic colorants), manufactured or distributed by them. Members shall comply worldwide with all applicable laws and regulatory requirements dealing with the safety and the environmental impact of synthetic organic colorants.

ETAD recognizes that the legal requirements for hazard communication differ considerably in various regions where organic colorants are marketed. A primary objective of this Code of Ethics is to ensure that such differences do not deprive customers in countries with less stringent requirements of hazard information which is made available to their counterparts in countries with more comprehensive regulations. To achieve a common high standard of hazard communication ETAD members shall

- fully inform all customers about all known significant hazards;
- adopt policies to assure an equivalent level of hazard communication worldwide concerning their product.

3. Products Safety Information

3.1. Safety Data Sheets

Member companies shall ensure that for each of the synthetic organic colorants on their selling range, there is a safety data sheet with an appropriate information content and that it is supplied to all customers.

3.2.Labelling

The EU regulations provide an appropriate basis for classification and labelling of organic colorants.

Where the laws of the country the products are sold to, require more stringent or mandate different labelling, the members shall adhere to such required or mandated labelling. In countries with less stringent requirements the labelling shall be in accordance with the EU system or an equivalent consistent with the policy of achieving a uniformly high standard of hazard communication.

3.3. Education and Awareness

ETAD members shall endeavour to inform customers of the safe handling procedures best suited to the products involved.

4. Cessation of manufacture and sale of certain hazardous colorants

The manufacture and sale of certain dyes identified as hazardous by regulation or classification by expert bodies is incompatible with ETAD membership. These dyes are referred to in Annexes A and B.

5. Compliance

Member companies shall comply with the Code of Ethics and shall make every effort to ensure that their subsidiaries do so.

Annex A

Azo dyes or preparations of azo dyes used in consumer applications, which contain, or release by reductive cleavage of azo bonds to any of the specified amines*.

Annex B

Individual Dvestuffs*

* The corresponding amines and dyes are listed with the applicable limit values in "Guidance to ETAD Member Companies on the Implementation of the Code of Ethics" which is regularly updated to the current state of scientific knowledge.

Benefits of ETAD membership

Recognition

Recognised by regulatory authorities, customers, and the public as the authoritative source of information on health, safety, and environmental issues relating to organic colorants.

Representation

Represents interests of members and customers to government authorities, the media, other industries, public interest groups, organised labour, academia, and research/testing/consulting organisations.

Harmonisation

Advocates, where regulations are necessary, a harmonisation of the requirements, so that compliance costs are reduced.

Code of Ethics

Encourages members to adhere worldwide to a high ethical standard and promotes image of a responsible and safety-minded manufacturing industry.

Guidance

Provides guidance to ETAD member companies on interpretation of new regulatory requirements and recommends specific measures to implement the ETAD Code of Ethics.

Education and training

Develops and publishes education and training materials pertaining to organic colorants, e.g. for safe handling practices, product stewardship, and pollution prevention.

Research and testing

Cost-sharing of research and testing programs aimed at a better understanding of the health and environmental aspects of dyes and organic pigments.

Information

Responds to inquiries about the colorants' industry, provides information on topical issues and disseminates comments and position papers.

Database

Maintains and makes available to members a computerised database of literature pertaining to the health and environmental aspects of dves.

ETAD member companies

Archroma Management GmbH

Switzerland

ATUL Limited

India

BASF SE

Germany

BEZEMA AG

Switzerland

Cappelle Pigments n.v.

Belgium

Clariant International AG

Switzerland

Colourtex Industries Ltd.

India

Dainichiseika Color & Chemicals Mfg. Co., Ltd.

Japan

DIC Corporation

Japan

DyStar Colours Distribution GmbH

Germany

Everlight Chem. Industrial Corp.

Taiwan, R.O.C.

Farbchemie Braun GmbH & Co. KG

Germany

FUJIFILM Imaging Colorants Ltd.

UK

Heubach GmbH

Germany

Huntsman Textile Effects

Switzerland

Jay Chemical Industries Ltd.

India

M. Dohmen GmbH

Germany

Nippon Kayaku Co., Ltd.

Japan

Oh Young Ind. Co. Ltd.

Korea

Oriental Giant Dyes

& Chemical Ind. Corporation

Taiwan, R.O.C.

Sensient Colors Inc.

USA

Setaş Kimya Sanayi A.Ş.

Turkey

Sudarshan Chemicals Ind. Ltd.

India

Sun Chemical A/S

Denmark

Synthesia, a.s.

Czech Republic

T&T Industries Corporation

Taiwan, R.O.C.

Tennants Textile Colours Ltd.

Northern Ireland

TFL Ledertechnik GmbH

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"Color is a power which directly influences the soul."

Wassilv Kandinsky

"I prefer living in color."

David Hockney

"Color is an intense experience on its own."

Jim Hodges

"It is not the form that dictates the color, but the color that brings out the form."

Hans Hofmann





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