

## NEWSLETTER

### Message from the Secretary

Dear Colleagues:

This is the first issue of the Medichem Newsletter that will reach you electronically, unless you have requested a paper copy, or I do not have your email address. We will continue to have copies printed and available, but we will be phasing this out in favor of electronic copy.

We would like to have the Newsletter meet your needs for relevant information – please feel free at any time to send me information you think would be of interest to other members, or write an original piece to engage discussion. Ideas and articles are always welcome: [dmundt@environcorp.com](mailto:dmundt@environcorp.com).

This year we are sending out a call for nominations to the Board and for nominations for Chairman. Please consider whether you might be interested in serving, or know of someone who might like to serve. The Board generally meets at least once a year prior to the General Assembly held during an annual Medichem or ICOH meeting, and in the recent past at a second, mid-term meeting generally in association with a local workshop or meeting. The details of how to nominate a Medichem member to the Board are elsewhere in the Newsletter.

I hope that I will see many of you at the upcoming Medichem meeting in Taipei.

Dr. Diane J. Mundt  
Amherst, MA (USA)



### Announcement -- Medichem 2011 Board Elections – Call for Candidates

This year, the following Medichem Board members will complete their terms of office: Andreas Flückiger, Koichi Kono, Michael Nasterlack, Todor Popov, Thirumalai Rajgopal, Shrinivas Shanbhag, and Avi Wiener.

Board *Members* are elected for a term of 3 years, but may be re-elected for further terms, if they have the support of the Board and the Membership.

**Medichem members in good standing, are requested to nominate candidates to the Board.**

According to Article 5 Sect. 4.1 of the Medichem Constitution, each Board member shall be from a different country. This rule does not apply for those holding the offices of Chairman, Secretary, Treasurer, and immediate Past Chairman.

March 2010



MEDICHEM - Occupational and Environmental Health in the Production and Use of Chemicals

**Founded 1972 in Ludwigshafen, Germany**

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PROF. DR. E EMMANOUIL-  
NIKOLOUSSI (Greece)  
DR. A FLÜCKIGER (Switzerland)  
DR. J GER (Taiwan)  
PROF. DR. K KONO (Japan)  
DR. J MORALES CAMINO (Mexico)  
DR. M NASTERLACK (Germany)  
PROF. DR. T POPOV (Bulgaria)  
DR. S SHANBHAG (India)  
DR. E WHITESIDE (New Zealand)  
DR. A WIENER (Israel)  
DR. R WINKER (Austria)

(continued from Page 1)

**This year, candidates are NOT eligible from the following countries: Austria, Greece, Malaysia, Mexico, Netherlands, New Zealand, South Africa, Taiwan, or United States.**

All Board candidates must be Medichem Members in good standing, and also ICOH members in good standing, or at least agree to join ICOH if elected. Furthermore, the nomination shall only be valid if it is sent in along with written acceptance of the nomination from the candidate himself or herself.

The Board is additionally seeking nominations for Chairman. The Chairman is elected by the membership and serves for a period of three years, but is eligible for a single further period of three years if re-elected.

On completion of one/two term/s of office, the Chairman serves on the Board for one year only as "Past Chairman" without further election. He/she may then stand for re-election as a regular Board Member provided there is a vacancy on the Board for his/her country.

Any Medichem member may be a candidate for *Chairman*, proposed and seconded by other members, but candidates must be approved by the President of the ICOH.

Please send all nominations to the Secretary of Medichem,

Dr. Diane J. Mundt, by mail or fax, which can be found on the first page to the right or by e-mail:

[dmundt@environcorp.com](mailto:dmundt@environcorp.com).

All nominations must be received by the Secretary by May 31<sup>st</sup>, 2010. Nomination papers for both Board members and Chairman are included with this newsletter.

The ballot form for the election will be sent out along with the next Newsletter in July 2010.

Dr. Diane J. Mundt  
Amherst, MA (USA)



### ICOH Membership

The Medichem Board acts as the "Scientific Committee on Occupational Health in the Chemical Industry" of the International Commission on Occupational Health, ICOH. While all Medichem Board members must be ICOH members in good standing, this is not mandatory for other Medichem members; however, the Board encourages every Medichem member to join.

### ICOH 2012 Congress

In 2012, the Medichem annual congress will be held jointly with the ICOH meeting in Monterrey, Mexico. Preliminary information can be found on the ICOH website at: [http://www.ichoweb.org/site\\_new/ico\\_news\\_detail.asp?id=6](http://www.ichoweb.org/site_new/ico_news_detail.asp?id=6)

The theme of the upcoming Congress is "Occupational Health for All: From Research to Practice", and is based on the belief that all workers of the world require health protection to prevent any occupational disease or injury as part of their human and labor rights.

To achieve such an important goal, we need to take advantage of new scientific information to develop innovative guidelines, new approaches and procedures, training courses, and so on that can be applied to workers' health protection.

Over 90% of scientific papers on occupational health are written in developed countries, though it is in developing countries where the most compelling needs in this field are a part of everyday reality.

The Monterrey Congress aims to build a bridge between research and practice in order to help developed and developing countries improve the level of health protection for workers and help prevent occupational injuries and diseases.



## Taipei EPICOH-MEDICHEM 2010

The main theme of this year's EPICOH-MEDICHEM 2010 meeting is Occupational Health under Globalization and New Technology. The meeting will be held 21-24 April 2010.

Globalization, by definition, is the transformation of phenomena from a local to a global scale. It can also be described as a process by which the people of the world function together and are unified into a single society.

This progression is a combination of economic, technological, sociocultural and political forces. Globalization has various aspects that affect the world in financial, political, economic, cultural, informational, ecological, social, language, technical, ethical and industrial ways.

Over time, new technological methods and topics are developed and opened up to debate. Some arise due to theoretical research, others due to commercial research and development, or new tools and discoveries. "New technology" is a general term used to denote significant technological developments that broach new territory in their field in some significant way.

Examples of current new technologies include nanotechnology,

biotechnology, cognitive science, robotics, and artificial intelligence.

Under the above stress, the recent economic recession and crisis further aggravates the informal employment, underemployment, and hidden employment; the health impact of which we have much less understanding and research so far.

Workers and employers need to be made aware of such risks and how to manage them. But health and safety professionals in the individual country cannot do this alone.

The mission of this conference is to make the whole world's workplaces safer, healthier and more productive. We do this by bringing together and sharing knowledge and information, to promote a culture of risk prevention.

Through the conference, we share good practice, and communicate information in a variety of ways to reach workers and workplaces, especially in this new technology century.

We look out for risks which may only be emerging, due to the fast pace of change in the workplace. This conference aims to identify new and emerging risks. In order to achieve this, it will give an overview of safety and health at work in the world, describe the trends and underlying factors, and anticipate changes in work and their likely consequences for safety and

health. Additionally, it aims to stimulate debate and reflection among company's stakeholders and to provide a platform for debate between policy-makers at various levels.

The full program can be viewed at the conference website, including presentations currently scheduled. For additional information on topics to be presented, please visit: <http://www.epicohmedichem2010.tw/index.html>

Article obtained from Medichem 2010 website, Homepage



## An Introduction to SAICM

Adopted under the umbrella of the United Nations Environment Programme (UNEP) by the International Conference on Chemicals Management (ICCM) on 6 February 2006 in Dubai, the Strategic Approach to International Chemicals Management (SAICM) is a policy framework to foster the sound management of chemicals.

SAICM was developed by a multi-stakeholder and multi-sector Preparatory Committee and supports the achievement of the goal agreed at the 2002 Johannesburg World Summit on Sustainable Development of ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse

impacts on the environment and human health.

SAICM specifically aims at capacity building for developing countries and countries with economies in transition and better coordination of international efforts to improve chemicals management.

The SAICM Secretariat is co-located with the UNEP chemicals and wastes cluster in Geneva, Switzerland. UNEP and the World Health Organization (WHO) have lead roles in the Secretariat in their respective areas of expertise.

The Secretariat is integrated within the Chemicals Branch of the UNEP Division of Technology, Industry and Economics. It works in coordination with the participating organization of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) and UNDP as well as other intergovernmental organizations.

Since its adoption, SAICM has been formally acknowledged or endorsed by numerous governing bodies of intergovernmental organizations, among them the International Labour Association (ILO) and the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM).

A reference to SAICM has also been included in the Health and Ethics Policies of the

American Medical Association (AMA).

While up to now Medichem has not formally been linked to any SAICM activity, Medichem's objectives – occupational and environmental health in the production and use of chemicals – represent in fact everything that SAICM is all about.

Typical examples of Medichem-related activities in the recent past are, e.g., the workshops on Advanced HAZMAT Life Support (AHLs) organized and run by Medichem Board members Stephen Borron and Jorge Morales in the context of Medichem congresses. Other projects and activities by Medichem members, even if not performed under the Medichem flag, can easily serve as further examples for our active involvement in the creation of chemical safety in many countries and on multiple levels.

At the Medichem Congress 2011 to be held in Heidelberg, Germany (see announcement at the end of this Newsletter) SAICM will be one of the core topics. Medichem members will be encouraged to present projects and activities, which contribute to a safer production and use of chemicals and to the mitigation of unwanted effects, often stemming from improper or imprudent use.

At the upcoming Medichem Board Meeting and General Assembly in Taipei there will

be a proposal to formally endorse the SAICM objectives through Medichem and to encourage Medichem members to initiate or become actively involved in SAICM projects.

The enormous wealth of experience and expertise represented by the network of Medichem members across more than 40 countries worldwide provides invaluable resources, which can help to achieve the common goals of Medichem and SAICM.

Let us make more, and more visible, use of these resources! (More information on SAICM at <http://www.saicm.org>)

Dr. Michael Nasterlack,  
Ludwigshafen (Germany)



## National Occupational Health Award

At the last board meeting in Thessaloniki in October 2009 the board discussed a proposal for the Austrian Society of Occupational Medicine to provide a NOHA (National Occupational Health Award), at their upcoming congress in September 2010 in Villach, Austria. The board members present approved this proposal with no dissenting votes.

Meanwhile the Austrian-NOHA was announced in the "Austrian Journal Österreichisches Forum Arbeitsmedizin (ÖFAM)" and meeting papers will be published in this journal following the Society meeting in September.

The journal is in German and not Medline accessible; however, the journal is widely distributed to all Austrian physicians. In addition, the winning abstract will be published in the Medichem Newsletter, and the award winning contribution will be presented at the annual Occupational congress in Austria.

The Medichem award of 500 USD was doubled by the board of the Austrian Occupational Society, so that the winner will receive a total of 1,000 USD. The award winner receives, in addition, a certificate and free Medichem membership for two years. The Award winner may also use the title of "National Occupational Health Association winner 2010 of the annual Austrian congress" in his or her curriculum vitae.

The submitted Original-paper must be related to the field of occupational and environmental health in the production and use of chemicals. Young Austrian occupational or environmental health professionals (as a rule, under the age of 35 years) are eligible to submit a paper to the Austrian Occupational NOHA-committee. All details were announced in the latest issue of the ÖFAM and the deadline for submitting is the 31st of May 2010.

Along with the presentation of the award rules, information on Medichem was printed in order to promote MEDICHEM in the Austrian Occupational

Medicine Society. You will be informed about the outcome of the NOHA-process in the November Newsletter.

Dr. Robert Winker,  
Vienna (Austria)



### Meta-analysis: Benzene and NHL

*This abstract was obtained from PubMed for a recent article published in the Journal of Occupational, Environmental Medicine. Although occupational benzene exposures are far below those of years past, the associations between benzene and diseases of the hematopoietic system continue to be of interest. This publication reports findings of a meta-analysis of benzene and non-Hodgkin's lymphoma. The full article can be obtained from the journal.*

### Benzene Exposure and Non-Hodgkin Lymphoma: A Meta-Analysis of Epidemiologic Studies.

Dominik D. Alexander, and Meghan E. Wagner, *J Occup Environ Med.* Volume 52, Number 2, February 2010, 169-189.

**Objective:** To conduct a meta-analysis of studies of benzene exposure and non-Hodgkin Lymphoma (NHL).

**Methods:** A total of 8 cohort and 14 case-control studies were analyzed.

**Results:** Meta-analysis of any benzene exposure resulted in a summary relative risk estimate (SRRE) of 1.02 (95% CI: 0.94 to 1.12). The SRRE changed minimally when only data representing the highest level of benzene exposure were analyzed after an a priori data extraction protocol, using cumulative exposure as the optimum metric (SRRE = 1.08, 95% CI: 0.93 to 1.24).

Meta-analysis of five studies that reported results for 60 or more ppm-years of cumulative exposure yielded an SRRE of 1.08 (95% CI: 0.36 to 3.24). Similarly, an SRRE of 1.04 (95% CI: 0.96 to 1.12) for each 25 ppm-year increment of benzene exposure was observed.

**Conclusions:** The results from this meta-analysis are not supportive of an independent association between benzene exposure and NHL.



### UK Government Decides Pleural Plaques Not Actionable

In mid 2008, the UK Government issued a consultation document on whether pleural plaques should be considered a clinical condition caused by exposure to asbestos that should be grounds for compensation from the person responsible for the asbestos exposure. Until

late 2007, this had been the position under English law.

However, in November 2007, the House of Lords issued a judgement in which they held that while the presence of a pleural plaque was an indicator of past asbestos exposure, a plural plaque did not in itself constitute a disease state. Since there was no actual damage to health, no compensation was due.

In the light of representations made by individuals and organisations who strongly disagreed with the Law Lords' decision, and in recognition of the concerns that existed, the UK Government published a consultation paper on the issue, which sought views on a number of options in response to the ruling, including whether to overturn the House of Lords' judgment and legislate so that pleural plaques would again be compensable under civil law.

In total, the Government received 224 responses to its consultation paper. Among others, the European Justice Forum (EJF) made a detailed submission to the government arguing in favour of the House of Lords ruling. In addition, reports were received from the chief medical officer (CMO) for England and Wales and the Industrial Injuries Advisory Council (IIAC) reviewing the medical evidence on pleural plaques. Further discussions have also taken place with key medical experts in relation to the medical evidence.

Not until 25<sup>th</sup> February 2010 did the government issue a statement on the results of that consultation. In summary, the Ministry of Justice agrees with the House of Lords and the presence of pleural plaques will not attract compensation or be actionable.

It has been confirmed that the presence of pleural plaques is an indicator that a person has been exposed to asbestos. Given that exposure to asbestos increases the risk of developing a serious illness, a diagnosis of pleural plaques can give rise to an understandable sense of anxiety and unease.

However, while the exposure to asbestos has resulted in an anatomical change, in the great majority of cases pleural plaques do not in themselves produce any significant physiological change or loss of lung function, and only very rarely give rise to physical symptoms. In such rare cases it is still possible for individuals to bring a civil claim for damages.

The UK Government will support a communication programme to reduce concern about pleural plaques. Also, there will be one-off compensation by the government for a limited number of claims that had been made and were before the courts prior to the House of Lords decision.

This outcome is in contrast, e.g., to the position in the United States where pleural

plaques provided the basis for a significant extension of asbestos litigation in that country.

(based on a communication by the European Justice Forum, EJF)

Dr. Michael Nasterlack,  
Ludwigshafen (Germany)



## **Mortality among Titanium Dioxide Workers**

*Titanium dioxide has been studied extensively, and it has become the focus of attention in the scientific and lay communities because of its use on the nanoscale in various consumer products. This new study, the abstract obtained from PubMed online, is from a recently published article in the Journal of Occupational and Environmental Medicine.*

**Mortality Among Titanium Dioxide Workers at Three DuPont Plants.** Elizabeth D. Ellis; Janice Watkins; William Tankersley; Joyce Phillips; David Girardi. *JOEM*. March 2010 - Volume 52 - Issue 3 - pp 303-309.

**Objective:** To evaluate the mortality among workers employed at three titanium dioxide plants in the United States.

**Methods:** We expanded and updated a cohort employed at titanium dioxide plants.



Cause-specific standardized mortality ratios (SMRs) were calculated combined and stratified by plant for workers employed at least 6 months between 1935 and 2005.

**Results:** No indications of excess mortality from any cause were found. All causes SMR increased with length of plant operation as did most cause-specific SMRs. With lung, the target organ of interest, no increases in malignant or nonmalignant respiratory disease were observed.

**Conclusions:** The mortality rates are comparable with the general US population. Increasing SMRs with length of plant operation is indicative of waning healthy worker effect with time since first employment. The results are comparable with other titanium dioxide cohort studies.



### **Medical surveillance, exposure registries, and epidemiologic research for workers exposed to nanomaterials**

*Although workers have been potentially exposed to various engineered nanomaterials with diverse chemical properties and constituents, there has been little consensus retarding how the occupational health community should take measures to consider*

*monitoring or tracking workers for future epidemiological studies. In this article, Drs. Trout and Schulte describe various options for consideration for monitoring workers exposed to engineered nanomaterials (abstract available online at the journal's website).*

*Please also see the announcement at the end of the newsletter for an upcoming conference on this particular subject.*

Medical surveillance, exposure registries, and epidemiologic research for workers exposed to nanomaterials Douglas B. Trout and Paul A. Schulte. *Toxicology*. Volume 269, Issues 2-3, 10 March 2010, Pages 128-135.

While there is a growing body of information about hazards of nanomaterials, little is known about the risks to workers exposed to them.

However, workers are the first people in society that are being exposed to the growing inventory of "nano-enabled" products in commerce. The number of workers involved in the investigation, manufacture, production, and disposal of these types of products is growing.

Although toxicologic research is still the highest priority, it is time to actively anticipate the health needs of workers. To date, precautionary risk management approaches have been widely advocated.

Now there is a need to initiate an evolving process to identify the issues in medical surveillance, utilization of exposure registries, and the conduct of epidemiologic research.

Each of these are related complex endeavors that build on the toxicologic evidence and extent of exposure. There is a need to assess the scientific basis and research needs for determining early functional changes, organ system and disease responses for use in targeted medical surveillance.

There is also need for development of criteria for extrapolating toxicological data in biological systems to predict the risk of adverse outcomes in humans. In the meantime, exposure registries may be pivotal in helping societies act in the face of uncertainty in a precautionary manner, but legal, ethical, and logistical issues need resolution.

Epidemiologic research will build on these efforts and may ultimately contribute critical definitive rationale for medical screening, risk assessment and management.





**Welcome to New Members**

Dr. **Khalid Selim**, P&G Health and Wellness Department Leader (Egypt)

Dr. **Farid Slaoui**, P&G (Morocco)



**Upcoming Events**



**Nanotechnology Conference**

The US National Institute of Occupational Safety and Health (NIOSH) sponsor the upcoming conference:

**Nanomaterials and Worker Health: Occupational Health Surveillance, Exposure Registries, and Epidemiological Research**

Location: Keystone, Colorado, USA

Dates: 21-23 July 2010.

Additional information, including accommodations and current program, is available at:

<http://www.cdc.gov/niosh/topics/nanotech/keystone2010/default.html>

The registration fee is \$350.00, which includes all conference plenary and breakout sessions, three full continental breakfasts, morning and afternoon refreshment breaks, two lunches, and one light dinner reception.



**Mark your Calendar!!**

**2011 MEDICHEM Congress: Occupational Health in a Changing World**

Heidelberg, Germany,  
2-5 June 2011.

Additional details will soon be available and sent to all members.

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