

MIHA

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**HEARTIEST CONGRATULATIONS TO OUR
DIRECTOR GENERAL OF THE DEPARTMENT
OF OCCUPATIONAL SAFETY AND HEALTH,**

IR. DR. HAJI ABU BAKAR CHE MAN

ON BEING AWARDED

THE PRESTIGIOUS

WILLIAM P. YANT AWARD

ABOUT THE WILLIAM P. YANT AWARD

The William P. Yant Award was established in 1964 to commemorate the leadership and breadth of contributions to industrial hygiene of William P. Yant, ScD, first president of the American Industrial Hygiene Association (AIHA). Sponsored by the Mine Safety Appliances Company, the award is presented for outstanding contributions in industrial hygiene or allied fields to an individual residing outside the United States

RECEIPT OF AWARD AT THE AMERICAN INDUSTRIAL HYGIENE CONFERENCE & EXHIBITION IN ANAHEIM, CALIFORNIA, USA

Our dear Director General, Ir. Dr. Haji Abu Bakar, will be receiving the award in May at the forthcoming AIHCE Conference, which will be held in Anaheim, California. Incidentally, he will be the first in South East Asia to receive this award.

We hope that he will be able to take time off his busy schedule to enjoy beautiful Southern California, and maybe slot in a trip to Disneyland with the family!

Once again, Congratulations!!



FEATURE ARTICLE ON IR. DR. HAJI ABU BAKAR CHE MAN AND HIS VALUABLE CONTRIBUTION TO THE FIELD OF INDUSTRIAL HYGIENE IN MALAYSIA

By Dr Abu Bakar Che Man, Dr. Jalaluddin Dahalan & Zainal Mubarik Zainuddin



Ir. Dr. Haji Abu Bakar Che Man is a leading figure and a pioneer in industrial hygiene in Malaysia. He graduated from University of Newcastle, Australia in Mechanical Engineering in 1974. He worked as an assistant design engineer with Maxitherm Boilers Pty Ltd in Sydney before returning to Malaysia to join the Factories and Machinery Department (FMD) under the Ministry of Labour and Manpower in 1975. During the first three years with the FMD, his duties were confined to checking designs of pressurised equipment and hoisting machinery according to the various approved design codes. He also conducted annual inspection on the equipment and machinery for the issuance of certificates of fitness in line with the requirements of the Factories and Machinery Act 1967 and the regulations made under it. He was transferred to be the Director of FMD for the southern state of Johore in 1976 where he served for more than two years before pursuing a Master Degree in Industrial Hygiene at the University of Pittsburgh, USA during the 1978-79 session, under the sponsorship of the Government of Malaysia.

On successful completion of the Master degree, he returned to the FMD Malaysia in early 1980 and was given the responsibility to set up an Industrial Hygiene Unit in the Department. He took up the challenge and from that time onwards marked the beginning of industrial hygiene activities in Malaysia. He carefully strategised his move to introduce the science to his working colleagues and then managed to convince the Government to allocate additional staff and fund to carry out industrial hygiene activities and to purchase equipment. In line with his new position as the Director of Industrial Hygiene, he spent many hours conducting training and demonstrating the use of newly purchased equipment to the pioneering staff before embarking on actual industrial hygiene activities at the industrial workplaces.

Abu Bakar realised that there was plenty of work out there which required urgent attention but with limited resources available, he prioritised the tasks based on the severity of the hazards, the number of workers affected and the availability of technical and medical support for the job. His prioritised list of "tasks to be done" placed exposure to inorganic lead as the hazard of top priority. This was followed by exposure to crystalline silica, noise, asbestos dust, formaldehyde and cotton dust as the most common hazards in the industrial workplaces which needed attention. Industries having the hazards were identified and staff of the Unit conducted inspections and monitoring to assess the risk posed by the hazards. The work carried out covered all parts of the country involving the FMD branch offices, the Department of Chemistry under the Ministry of Science and Environment which assisted in carrying out analysis of the collected samples and medical officers from University of Malaya and the Ministry of Health who carried out medical examinations on the high-risk workers. The results of the monitoring and examinations were discussed with the employers and directives were

given under the Factories and Machinery Act for the hazards to be controlled to an acceptable level and the high-risk workers subjected to medical surveillance programme. The ACGIH TLVs were used as guidelines in decision making. The exercise indirectly promote the science of industrial hygiene to the employers and workers in the affected industries and educate them on industrial poisoning and diseases and the preventive measures available to reduce the probability of occurrence.

Abu Bakar's leadership and seriousness in carrying out the industrial hygiene work in the early 80's had generated results that caused great concern to the Government. Based on the results of the assessment activities, the Government promulgated specific regulations under the Factories and Machinery Act 1967, namely the Lead (1984), Asbestos Process (1986), Noise Exposure (1989) and Mineral Dust (1989) to control the situation at the industrial workplaces. Because of his training in US, the regulations promulgated were adapted from OSHA Standards with certain changes to suit with the local environment and the level of development in the country. The impact of the regulations created considerable demand for technical training in the areas of industrial hygiene. In order to cope with the demand, Abu Bakar and his team carried out promotional seminars and workshops and training courses which were jointly organised with the Federation of Malaysian Manufacturers (FMM) which is an employers' association. He was instrumental in the development of course curriculum and training materials in the area of hearing conservation programme, mineral dust, and safety in the use of chemicals. He also contributed to the development of the training courses in Local Exhaust Ventilation System, Control of Industrial Major Accident Hazards and Introduction to Occupational Medicine for General Practitioners. These courses introduced participants to relevant areas of industrial hygiene and health and served as the critical platform for industries to comply with the newly introduced regulations.

In view of the tremendous demand for training in the areas of occupational safety and health (OSH), Abu Bakar convinced his immediate supervisor and later the Government to set up an institution similar to NIOSH of US to conduct training, research, consultation and as a center for information on OSH. The Government with the assistance of ILO engaged a consultant, a senior official from NIOSH US, to conduct a feasibility study on the formation of the Institute. Abu Bakar was the local counterpart assisting the ILO consultant in the study and later, after the report has been submitted to the Government, he was assigned the responsibility of implementing the establishment of the Institute including the construction of its physical infrastructure. The Institute was established in 1992 as a company owned by the Government and was given the name NIOSH of Malaysia. During its infancy period, Abu Bakar assisted the Institute by conducting courses mainly in the areas of Industrial Hygiene to facilitate industries to comply with the new regulations. From 2002 to 2004, he was given the opportunity to become the CEO/Executive Director of NIOSH Malaysia on a secondment basis. During his short stint with NIOSH, he strengthened the organization by realigning the direction and redefining the initial goal of the institute that is to become the partner of industry to improve OSH. One of his initiatives was to strengthen workers' education in OSH by introducing NIOSH Safety Passport scheme. Starting from the Oil and Gas industry, contract workers who have attended one-day course on OSH and pass the assessment at the end of the course will be awarded with the Safety Passport, which is the prerequisite before starting work.

Abu Bakar had given many lectures in the local universities in the areas of industrial hygiene and had supervised many graduate students in preparing their thesis in the field of industrial hygiene and occupational health. Many of his students and trainees have become leading consultants for industrial hygiene in Malaysia. Because of his experience in training development, he was chosen as an International Labour Organisation (ILO) consultant to prepare a training manual on Safety in the Use of Chemicals in June 1989 in Geneva (ISBN 92-2-106470-0). The training manual was designed for used by safety officers and trainers to train workers in the area of chemical safety. This manual has been translated into many languages such as Chinese, Vietnamese, Thai, Indian and Indonesian.

There were efforts to translate the manual into other languages to be used in other developing countries. Abu Bakar has also been appointed as a short-term ILO consultant to prepare and execute regional training for government officers for Safety in the Use of Chemicals (Manila, 1990) and Safety in the Use of Agriculture Chemicals (Bangkok, 1990).

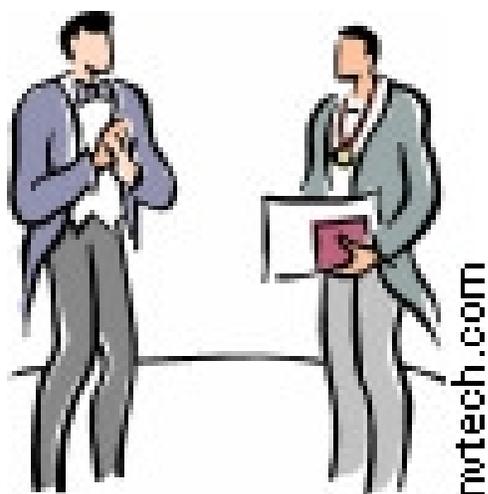
In 1993, Abu Bakar was promoted to be the Director of Industrial Health and Deputy Director General for the Department of Occupational Safety and Health. In that position he was able to influence the direction in which occupational safety and health legislation be developed. Due to the weaknesses embedded in the Factories and Machinery Act, the Government decided to enact another legislation entitled the Occupational Safety and Health Act 1994. The new Act covers all workplaces and promotes self-regulation compared to the old Act, which has coverage only in premises classified as factories and was very prescriptive.

With the new Act in place, Abu Bakar initiated the promulgation of several regulations to protect the health of workers. One of these entitled the "Use and Standard of Exposure of Chemicals Hazardous to Health 2000 (USECHH)" gives recognition to an industrial hygienist (referred to as an assessor) and his role in complying with the key requirements of the regulations. The impact of the regulations attracted more people to the discipline of Industrial Hygiene resulting in local universities introducing courses in the discipline at undergraduate and graduate levels.

In December 1998, he was promoted to be the Director General of the Department of Occupational Safety and Health, Malaysia where he is still occupying the position except for a short two-year secondment to NIOSH Malaysia as the CEO/Executive Director. Beside his official duty as the Director General, he has been appointed to be on the Board of Engineers Malaysia, Board of NIOSH, National Standards Committee, chairmen of Industrial Standard Committees on Mechanical Engineering and OSH, and chairman of the Engineering Accreditation Council.

Based on his vast experience and contribution to the development of Industrial Hygiene in Malaysia, Abu Bakar was appointed Advisor to the Malaysian Industrial Hygiene Association (2004). He is also awarded with an Honorary Doctrate Degree (PhD) in Occupational Safety and Health from the University of New Castle, USA in recognition of the immense contribution made to the discipline of Occupational Safety and Health in Malaysia (October 2004).

Abu Bakar has single handedly championed the promotion of industrial hygiene in Malaysia. Without his efforts and contributions, the speed of awareness on the importance of industrial hygiene will not be realized and at the level we are seeing it today in Malaysia.



**ONCE AGAIN,
CONGRATULATIONS
FROM ALL MIHA MEMBERS**