Bulletin

Occasional information for members

Institute of Safety in Technology and Research

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CONTENTS

Membership News 2

Dates for your Diary 3

ISTR Autumn Symposia 2009 -
The Carriage of Dangerous Goods 3
Animal Issues – Not Just Allergies 4

ISTR Skills Development Workshop 2010
Controlling Airborne Contaminants at Work 5

ISTR Biosafety Accreditation Scheme 7

Current Consultative Documents 7
GM Contained Use Regulations

ISTR's Electronic interface 7

ISTR Award 8

General enquiries about the Institute should be addressed to the Honorary Secretary:

istr-secretary@*istr.org*.uk

Enquiries about membership should be addressed to the Membership Secretary:

istr-membershipsecretary@*istr.org*.uk

ISTR AGM and Summer Symposium

UNIVERSITY OF BATH

6/7 July 2010
For details see
http://www.istr.org.uk/events.shtml

ISTR EXECUTIVE COMMITTEE

The executive committee has met at the MRC, Edinburgh in December 2009 and the University of Birmingham in March 2010. The following is a summary of the matters considered.

Universities' Chemical Safety Forum (UCSF)

Following a request from the Chair of UCSF, a donation of £250 was agreed. The UCSF covers an area of interest to ISTR and has helped stage ISTR November symposia.

Future events

The 2010 AGM and Symposium will be accommodated in newly refurbished facilities on the University of Bath campus situated on Claverton Down, to the east of Bath.

2011 AGM and Symposium to be hosted at University of Dundee. Suggested topic "Suitable and sufficient risk assessments - 19 years on".

November Symposia, no formal dining arrangements for those staying overnight but delegates will be advised on day 1 where the Executive Committee will be dining.

November Symposia venue: it was agreed that after 2010 consideration would be given to an alternative to Coventry that's also easily accessible from all parts of the UK.

Biosafety Accreditation Scheme

The names of people accredited under the scheme will be published in the Biosafety section of the ISTR website. Following a query from the Bio-Safety working party it was agreed that it was not essential for BSPs to be members of ISTR, although it was desirable.

Paul Jackett to attend a CEN Workshop in Frankfurt representing ISTR and to present the ISTR Bio-safety Accreditation Scheme.

Collaboration with other organisations

Approval was given to requests from HEaTED and IOSH to share web links publicising training/symposia.

ISTR Website

It was agreed to move the ISTR website (previously hosted free by UB) to the ISP Heart Internet at an annual cost of about £120.

A WORD FROM THE EDITOR

Welcome to another issue of the *Bulletin*. The *Bulletin* is a service to and for members. In this issue you will find news of members, details of forthcoming *ISTR* activities, reports of recent meetings a summary of Executive Committee business. If you have any item that may be of interest to other members please let me know.

From time to time, as a further service to members, advertising material may be enclosed with the *Bulletin* but this does not necessarily mean that the ISTR endorses the particular products.

The ISTR is not responsible for individual views expressed in the *Bulletin*.

The Bulletin is edited by: Dr FJ Young, Health and Safety Unit, The University of Birmingham EMail f.j.young@bham.ac.uk

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MEMBERSHIP NEWS

The Institute has admitted the following into membership

Further details may be found in the updated, on-line version of *ISTR Members' Handbook* in the members' only section of the ISTR website [http://www.istr.org.uk/members/cmem.shtml].

Full Members:

Miss Lesley Andrews, Dr Tanja Aspinall, Mr Dean Cross, Mr Mark Earthrowl, Mr Richard A Eley, Dr Ai E Ling, Mr C Paul Maggs, Mr Brian R McBride, Mr Jon Mossman, Dr Mark A Pickett, Mr Martin Rollo, Mr Richard Selkirk and Mr Baber Siddiqi.

Associate Members:

Mr Glenn Bowker and Mrs Adewunmi Olatilu.

Upgrade to Member:

Mr Robin Parsons.

Enquiries about membership should be addressed to the Membership Secretary: istr-membershipsecretary@istr.org.uk

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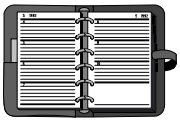

DATES FOR YOUR DIARY

2010 AGM and Summer Symposium

University of Bath 6 and 7 July 2010, theme "New and Emerging Technologies". The AGM on the 6th will be preceded by a visit to the Roman Baths. Topics for the symposium on the 7th include perception of risk, synthetic plant products, biosensors in textiles, The Diamond Light Source, Nanotechnology – the new interest group, latest developments, safety guidelines.

2010 ISTR Autumn Symposium

Managing the nasties (drugs, chemical weapons, explosives etc.), 17 November 2010, Windmill Hotel, Coventry

2010 ISTR Biosafety Section Symposium

Single Regulatory Framework, 18 November 2010, Windmill Hotel, Coventry

For more information contact the Events Secretary: istr-eventssecretary@istr.org.uk

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ISTR Autumn Symposia, November 2009

The ISTR 2009 Autumn Symposia were held at the Windmill Hotel, Coventry on 18 and 19 November 2009. 58 delegates attended the *Carriage of Dangerous Goods* symposium and the next day 65 attended an ISTR Biosafety Sub-Group symposium on Animal Issues. *Copies of the presentations may be downloaded from the members' section of the ISTR website [http://www.istr.org.uk/members/cmem.shtml].*

THE CARRIAGE OF DANGEROUS GOODS

This account of the symposium was kindly provided by David Heath

The Carriage of Dangerous Goods 2009 Regulations and how they interact with ADR
Desmond Waight – Dangerous Goods Consultant

Desmond Waight, a consultant Dangerous Goods Safety Adviser, spent the morning engaging the delegates in getting to grips with *The Transport of Dangerous Goods Regulations 2009* and their relationship to ADR. Having decided if our materials are dangerous goods, Desmond went on to explain the steps we must take to ensure their safe transport.

Step 1 is to train the staff responsible for dispatch and transport of the goods. Training needs to cover classification, packaging, labelling / marking, documentation and loading vehicles. Once trained, the competent persons can then move to step 2.

Step 2 involves recognising and classifying materials into one of the packing groups.

Step 3 concerns identification of goods by Proper shipping name and UN number.

Step 4 is proper containment. It is the responsibility of the packer to ensure the pack is suitable / compatible for the goods using performance tested packaging.

Step 5 is to label and mark the pack correctly, label being the symbol and mark being the textual information.

Step 6 involves loading the vehicle, ensuring segregation where necessary and placarding of the transport unit.

Step 7 is concerned with documentation, in the appropriate language(s). This can be English if sent

from the UK. Information must include full description of contents, name quantity, UN number, consignor, consignee and special info if needed. Transport documents are not required for Limited Quantities (LQs) or Excepted Quantities (EQs)(see later).

Step 8 relates to 'operational controls' (except LQs and EQs). Special driver training is required for listed hazardous substances. In vehicles passengers are forbidden, no smoking, no opening of packages, documents must be carried, torch to be carried, crew members to have photo ID, vehicles carrying dangerous goods above threshold to have orange plates displayed.

CDG 2009 and ADR - Case Study
Desmond Waight – Dangerous Goods Consultant

The morning finished with a number of case studies, the sort of materials and substances many of our research colleagues send around the UK and abroad. These included oxygen, carbon dioxide, as compressed gas, refrigerated liquid and solid dry ice, hydrochloric acid and liquid nitrogen. As Desmond Waight explained, it's easy **when you are trained !**

Having your dangerous goods accepted for carriage – what do the carriers require?
Gordon Cameron - Freight Transport Association

Gordon Cameron addressed the problems carriers' face, in terms of what they can and will not carry on behalf of the client. Carriers will not accept regulated products, products that are not identified, many toxic or infectious materials or goods that are deemed to be highly dangerous. The Royal Mail are particularly stringent, they will not carry aerosols, gases, pathogens or poisonous or infectious materials. They will prosecute establishments who contravene. What carriers will accept are LQs, EQs, non regulated products and non hazardous materials. Examples were given of specific limited quantities (see slides on ISTR website). He then went on to describe the operating procedures necessary for moving small quantities of materials, under the threshold limits. Key to all this is the need for driver training and if you don't know – ASK.

Transport of novel compounds and infectious materials
Sue Bentley – AstraZeneca?

Susan Bentley talked about the transport of novel research and development compounds around the world. These are often in very small amounts and of unknown toxicity. Where toxicity data is available it is possible to apply the criteria in the dangerous goods modal regulations. Where the material is an 'unknown' these should be categorised as 'toxic packing group 1'

For EQ's UN packaging is not required but the inner and outer container must meet test requirements and a consignment note is needed. For LQs by road the limit is <30kgs. By air a shipper's declaration is needed. If shipping to the US there are no restrictions if the quantity is < 1g or 1ml and the cumulative total is < 100g/ml.

Infectious materials are categorised as 'cat A' or 'cat B'. Cat A are capable of causing disability of life threatening disease if it escapes. These would be classed as UN2814 or 2900 and special security measures may be needed if the pathogen is listed in anti terrorism legislation. Cat B are other less harmful organisms and come under UN3373. Human tissue/blood samples are not regulated for transport unless they are hazardous (infected/contain pathogens) – they are regarded as exempt human specimens. The same goes for exempt animal specimens. Similarly, cultures of biological agents are not regulated unless they contain pathogens. Plasmids are not regulated but may be hazardous under CLP regulations. Similarly toxins derived from plant, animal or bacteria are OK unless again they contain pathogens. If genetically modified materials contain pathogens, again they have to be classified in the appropriate infectious category.

Transport of Radioactive Substances
George Sallit – Department for Transport

George Sallit, Transport Radiological Advisor at the DfT, rounded off the day by giving an overview of the requirements for transporting radioactive materials. He demonstrated a new International Atomic Energy Agency software package designed to guide a user through the choices when deciding how to package a radioactive sample. Currently it is available as the beta version and can be tried by contacting one of his colleagues at greg.o@connor@dft.gsi.gov.uk

ANIMAL ISSUES NOT JUST ALLERGIES

This account of the symposium was kindly provided by Dr Arthur Mitchell, who says, once again we had a very good turnout for our bioday symposium. The programme was both varied and full - a good symposium with excellent presentations covering a number of different areas. The order of presentations differed slightly from the published programme due to the late arrival of two of the speakers.

Are tissues a cure for laboratory animal allergy in a university?
Dr Ian Scragg – University of Dundee

Ian Scragg's talk differed from the normal presentation in so far as he had a number of questions for the audience on their approach to what should be in place

for laboratory animal allergens. This was a lively session involving very active audience participation.

The Single Regulatory Framework and focus group feedback
Dr John Newbold and Dr Lorraine Medcalf – HSE

John Newbold and Lorraine Medcalf introduced the Single Regulatory Framework (SRF). Many people in the audience were not too familiar with the proposed SRF and the presentation from the two HSE representatives gave very useful information.

A problem with flies
Mrs Marion Richards – MRC

Marion Richards from the MRC in Edinburgh gave a paper outlining the problems that can arise from working with flies. This was an interesting talk since it highlighted issues that many in the audience had not considered. Hygiene and good working practices were two important factors identified. The need for health surveillance was also highlighted. A presentation that left many in the audience reflecting on their own establishments and what control factors were in place.

Don't pet the animals – the E.coli issue
Dr Martin Vinnell – University of Cambridge

Martin Vinnell's talk, although delivered in a light hearted manner, had some serious issues; the press and their reports on young children visiting farms. Our world is not sterile and our immune system has evolved to combat the majority of agents. This talk was a timely reminder from Martin Vinnell on our own perceptions.

In vivo imaging with PET/MR – the issues
Dr Jeff Dalley – University of Cambridge

An excellent talk by Jeff Dalley on safety issues arising from PET/MR scanners ranged from noise to problems when the magnetics are running to the hazards of metallic objectives including chairs becoming lodged in the magnetics. Illustration of the latter was a nice reminder to focus the mind on the potential hazards.

Laboratory animal allergens
Dr Alan Swann – Imperial College London

Alan Swann presented a thorough analysis on publications dealing with laboratory animal allergens. A report on these findings has been published and available from Imperial College should you wish a copy.

ISTR Skills Development Workshop 2010

CONTROLLING AIRBORNE CONTAMINANTS AT WORK

The workshop was held in the splendid new facilities afforded to the University of Birmingham's Health and Safety Unit, writes Mark Hoare. The presenter of the course was Steve Robertson, the owner of Crowthorne Hi-Tec Services, an independent provider of a validation services for the commissioning and maintenance testing of containment facilities.

The workshop, based on the latest guidance from the HSE, HSG 258, covered all types of LEV equipment, including enclosing hoods (e.g. fume cupboards and biological safety cabinets), receiving hoods (e.g. for hot work, grinding etc.), and capturing hoods (e.g. for welding, soldering, woodworking etc.)

The new document HSG 258 replaces various previous documents including HSG 37 and HSG 54, bringing all the guidance into one document. In Steve Robertson's view, the document is not perfect and several of its requirements are difficult to fulfil. However, he was able to explain and show alternative ways of demonstrating compliance with acceptable practice.

The morning was spent in the 'classroom', looking at all the aspects of LEV systems and why, when tested they fail. They fail, i.e. they do not control the

contaminant adequately because they are not designed correctly, the system has been modified or extended, the components are damaged or not running to their original specification, there are blockages or the work that is being done has changed, either in position or the contaminant produced.

The workshop went through all aspects of the design process, starting with the contaminants to be controlled and then looking at the capture hood, ducting, air cleaning devices, fans and discharge points.

Explanation was given of how to calculate the performance required and how to achieve it. The new guidance requires that when an LEV system is commissioned as well as ensuring the design criteria are achieved, the system must be fit for purpose, i.e. it will actually control the contaminant adequately. The final commissioning must then be done with the actual work being carried out. The workshop went through the commissioning process and subsequent monitoring regime to ensure the system remains operating to standard.

In the 'classroom' Steve Robertson had set up a test

rig to demonstrate how to measure air flows and performance correctly, and how easy it is to get false readings. We were able to have hands on experience of doing this.

In the afternoon we went to the Schools of Chemistry and Mechanical Engineering to look at LEV in use. We visited a plant room and roof where fans were

extracting air from fume cupboards, a glass blowing

workshop, an engine test facility where the LEV was extracting the air from the engines, a fume cupboard, a biological safety cabinet and wood working facilities. Steve Robertson was able to point out the good and not so good design points and practice and maintenance and testing arrangements. We were also able to measure air flows and pressures in the systems.

From the feedback received everyone thought the day was well worthwhile. It has demystified some of the myths associated with LEV but at the same time emphasised it is an areas of specialism in its own right. The workshop was limited to twelve people to ensure they got the maximum benefit from it.

Due to the favourable way it was received and the 'waiting list' that there is, ISTR is hoping to repeat the course, perhaps in the autumn.

ISTR BIOSAFETY ACCREDITATION SCHEME

The Scheme supports career development for those that seek to progress in the field of biological safety. The Scheme is in two parts. The Level 1 course is comprehensive and structured to meet a range of competency requirements and is widely supported by Biological Safety Officers (BSOs) and the Health and Safety Executive (HSE). Level 2, Biosafety Practitioner (Professional) provides the platform for the professional recognition of those who work full time in the field. CPD is an integral part of the scheme.

The Scheme at Level 1 started on 1st September 2008

The final part of the Scheme, Biosafety Practitioner Level 2 (Professional), was put in place in January 2010. For more information go to the Biosafety Accreditation Scheme web pages [http://www.istr.org.uk/biosafac.shtml] or contact the Scheme administrator by email: [istr-biosafadministrator@istr.org.uk].

CURRENT CONSULTATIVE DOCUMENTS

The Executive Committee organises formal responses from the ISTR to Consultative Documents (CD's) put out by the Health and Safety Commission, etc. Each such response is intended to be based on the views of the membership co-ordinated by identified individuals. These co-ordinators need to have expertise in a particular area of interest to the *Institute* because the timescales for responses to CD's is sometimes very short and there may be little opportunity for further consultation with the membership.

If you are willing to act in this capacity of "CD" co-ordinator for ISTR please contact Arthur Mitchell, Hon. Sec., and indicate the topic area you have the expertise to cover.

Volunteers are needed NOW for the following.

The documents may be downloaded from the web addresses provided.

Health and Safety Commission

CD231 - PROPOSALS FOR AMENDMENT OF THE GENETICALLY MODIFIED ORGANISMS (CONTAINED USE) REGULATIONS 2000

This Consultative Document sets out proposals from HSE to amend the Genetically Modified Organisms (Contained Use) Regulations 2000 (S.I. 2000 No. 2831). The amendments are needed because of differences between the Regulations and Directive 2009/41/EC on the contained use of genetically modified micro-organisms. The European Commission has notified the UK that it does not consider that the European requirements have been fully implemented.

The proposed amendments will be of particular interest to dutyholders involved in work with genetically modified organisms and to others with an interest in this topic.

Closing date for comments 31 May 2010
[http://www.hse.gov.uk/consult/condocs/cd231.htm]

ISTR'S ELECTRONIC INTERFACE

Bulletin

Whilst this copy of the ISTR Bulletin has been posted to you, an electronic version in Adobe Acrobat pdf format and in colour can be downloaded from the member's only section of the ISTR web site: [http://www.istr.org.uk/members/cmem.shtml]

ISTR Award

for Outstanding Contribution to Safety in Technology and Research

This award is given in recognition of the effort and success of a named member who has, in the view of the Executive Committee, made a significant contribution to safety in the field of technology, science or research through a publication, scheme, device, campaign, training material or other.

The Award

The award will comprise of a plaque and a small monetary award agreed by the executive from the Institute funds.

The award will be presented to any or all of the nominations that the executive considers meet the criteria at the AGM following nomination. An individual member or a group of the membership can make nominations. If no nominations are forthcoming for any particular year, or if the committee feels that no nomination has met the criteria then no award will be made that year.

Criteria

- The recipient must be a current member (any grade) of ISTR
- The results or end product are disseminated to other members or beyond
- It is an example of best practice or addresses a new problem or addresses a need
- It must be the nominees' own work or in a declared collaboration

The process

Nominations may be received by the executive at any time and will be considered at a meeting prior to the AGM. The nomination must be in writing detailing: the initiator, contribution description, and awardee(s). Where possible the contribution itself should be available to the Committee.

Nominations may come from other members, groups of members or the individual themselves. Nominees will be informed by the committee of their nomination and allowed to submit additional information.

Weighting/Merit will be given to nominations that have:

- Broad application (e.g. multidiscipline, applicable in a range of organisations, etc.)
- Availability to other members (e.g. is not restricted to the originating organisation, is not prohibitively expensive, etc.)
- Ease of Use (e.g. does not require prolonged or very specialist training before use)
- An effect (e.g. item, procedure, etc.) that truly addresses an issue (e.g. not just a review of literature)
- Personal effort required to produce said contribution (e.g. not a commercially available solution that has been subject to minor 'tweaks')
- Novel and innovative approaches or solutions

Presentation of the ISTR Award takes place at an AGM. Nominations can be made at any time but have to be received by mid-April at the latest for consideration by the Executive Committee before the next AGM. The nomination form can be downloaded from the Members' section of the ISTR website at [http://www.istr.org.uk/members/cmem.shtm#award].

ISTR on the World Wide Web: [http://www.istr.org.uk/]