

University NEWSBEAT

By the Communications Department, S 802 Ross, 667-3441

Course examines hazards of industrial chemistry

Ignorance of mercury led to Minimata Disease

What is the relationship between science and technology? According to Dr. Colin McArthur, "technology is the manipulation or control of nature, while science is concerned primarily with the achievement of an understanding of nature."

It is the development of technology, from primitive stone tools to sprays containing DDT to reduce the devastation of crops by insects, that has allowed man to compete successfully for survival on earth.

Technology has, however, also been responsible for harmful effects — again, the use of DDT serves as an illustration. It was as the result of scientific research, says Dr. McArthur, that the dangers of DDT became apparent, causing the pesticide to be banned in some areas.

"The range of problems that confront society today requires much more in the way of a basic understanding of nature than we now possess," he says.

One such lack of a "basic understanding of nature" was responsible for the death and illness due to Minimata Disease, caused by mercury poisoning.

Large quantities of mercury are used in a number of industrial

processes, such as the manufacture of chlorine and the processing of pulp and paper.

Mercury was, until the discovery of Minimata Disease, seen as an inert metal, and indeed this view is largely correct.

If a person were to accidentally swallow a quantity of mercury, for example, it would merely pass through the body without causing harm.

When industrial processes resulted in the spillage of mercury into nearby rivers, it was assumed that the mercury would sink to the bottom of the river and lie there peacefully.

It was not known, nor even suspected, that microbes found on river bottoms were able to metabolize the mercury and convert it into organic mercury derivatives.

One of these is methyl mercury which can be ingested into the human body and reacts harmfully with some of the body's critical enzymes.

It is this mercury derivative which causes Minimata Disease.

Since the discovery of the disease and its relation to mercury pollution the appropriate industrial processes have been adapted to

prevent mercury spillage.

Despite the fact that this process, from the discovery of the disease to the adoption of corrective measures, took several years, the problem of preventing mercury spillage is a relatively simple one.

In the case of DDT, for example, the mere removal of DDT from the market does not provide a complete answer. Instead, in the absence of other measures, it turns valuable crops over to the insects once more.

"Science must be encouraged to pursue its quest for knowledge, in its aim against both fundamental and applied problems, if we are to solve the immensely serious problems with which we are now faced," says Dr. McArthur.

The attempt to understand and analyze some of these problems is the focus of a new course, Industrial Chemistry and the Environment, conducted by Dr. McArthur as part of the Liberal Science programme in the Faculty of Science.

The course provides a historical background of the chemical industry, incorporating both Canadian and worldwide perspectives, and examines case studies in industrial processes and the role of research and development.

With that as a base, the students spend part of the course focussing on environmental and health concerns, sources of pollutants, government surveillance and enforcement, and the future and the need for research.

Students in the Liberal Science programme are not generally aimed at careers in chemical research. Many, however, will work in closely allied fields, or in service or administrative positions within the chemical industry, and

government.

"At one time", says Dr McArthur, "a concern for the environment in industry might have been regarded as an anti-company viewpoint."

This, he feels, is no longer the case. The chemical industry has become increasingly concerned with its effects on the environment, and is hiring people who are familiar with such problems.

Secretary of State to give French study fellowships

Approximately 250 fellowships for studying in French in the 1976-77 academic year will be awarded by the Secretary of State, it was announced recently.

The programme, administered in Ontario by the Ministry of Colleges and Universities, is designed to encourage students to enter into a full-time post-secondary programme offered in French at a French language or bilingual institution, in any discipline.

The value of the fellowship is

\$1,000. A supplementary \$1,000 may be awarded to students who register in a programme at an institution more than 35 miles from their homes, and who must establish a second residence near that institution.

Further information and application forms may be obtained from the Office of Student Awards, 110A Steacie Science Library.

All applications and supporting documents must be submitted to the Ministry by June 1, 1976.

Conference on the Canadian Judiciary

Justices Hugesson, Dubin to speak on judges and society

The fifth annual Osgoode Hall Law School Lecture Series will take place Thursday and Friday, February 26 and 27.

The series will focus on the Canadian judiciary and its role in Canadian society, and is held in cooperation with the Canadian Institute for the Administration of Justice.

The Institute is a non-profit federal corporation concerned with research and information gathering and dissemination with regard to the administration of justice in Canada. The Executive Director of the Institute, Osgoode professor Allan M. Linden, Q.C., is also the chairman of the conference.

According to Professor Linden, Canadian judges have only become visible in the last two or three years. The appointment of Justice Bora Laskin as Chief Justice of the Supreme Court of Canada, and the centenary of that court in 1975, have brought the judiciary into greater prominence.

Now, says Professor Linden, "we are trying to deepen our understanding of the role of the 500 federally appointed judges serving in our courts."

To that end, the conference will bring together judges, government people, lawyers, professors and students.

As with other years, a book will be published detailing the discussion and findings of the conference.

Following is the conference timetable, together with biographical information on the speakers and commentators.

Thursday, February 26

Topic I 1 to 3 p.m.

The Independence of the Judiciary

Speaker: Professor W.R. Lederman, Q.C., Queen's University. Professor Lederman is one of the most knowledgeable academics in the field of judicial

independence in Canada. In his paper for the conference, he will detail the significant changes that have occurred with regard to judicial independence in the last 20 years. Professor Lederman will examine the relationship between judges and government, as well as the ways in which judges can be removed.

Commentators: Chief Justice N.T. Nemetz (Trial Division) of the Supreme Court of British Columbia. Chief Justice Nemetz has recently been involved in a series of negotiations with the government of British Columbia and has developed a number of principles on the relations between government and the bench.

Michel Robert, a Montreal lawyer, will concentrate his discussion on the problem of the judge as a Royal Commissioner, and the way in which that role affects the concept of the independence of the judiciary.

The discussion on this topic will be chaired by H.W. Arthurs, Dean of Osgoode Hall Law School.

Topic II 3:30 to 5:30 p.m.

Appointment of Judges

Speaker: Ed Ratushny, special advisor to the Minister of Justice on the appointment of judges. Mr. Ratushny has held this post for three years and will share his first-hand knowledge of the appointment process by presenting to the conference a statistical summary of the people who have been appointed, their various qualifications, experience, and backgrounds.

Commentators: J.J. Robinette, one of Canada's foremost advocates. Mr. Robinette is Chairman of the committee of the Canadian Bar Association which advises the Minister of Justice on judicial appointments, and will share with the conference the methods that he uses and the criteria that are employed.

Professor W.H. Angus, Osgoode Hall Law School, has done a great deal of research on the question of judicial appointments and has made numerous recommendations about reforming the methods that have been used. He will comment on the practice in appointing judges of the Canadian government over the last few years.

This session will be chaired by J.D. McCamus, Associate Dean, Osgoode Hall Law School.

Topic III 7:30 to 9:30 p.m.

The Judge as Lawmaker

Speaker: The Honorable Jules Deschênes, Chief Justice of the Superior Court of Quebec. Chief Justice Deschênes will give his viewpoint on the question of how far it is permissible for the judiciary to go in changing the law without the intervention of Parliament.

Commentators: Mr. Justice C.L. Dubin, Ontario Court of Appeal. Mr. Justice Dubin, has demonstrated in his judicial opinions a rather bold attitude towards judicial lawmaking. He is a former academic and a distinguished trial lawyer.

Professor Peter Russel, Department of Political Science, University of Toronto.

Professor Russel has recently written an article in which he questions the right of judges to make law in a democratic society.

This session will be chaired by Professor Louise Arbour, Osgoode Hall Law School.

Friday, February 27

Topic IV 9:30 to 10:30 a.m.

The Judge and the Adversary System

Speaker: Professor Neil Brooks, Osgoode Hall Law School. Professor Brooks has worked for some years with the Law Reform Commission of Canada on the evidence project. He has developed a number of ideas about the problems of the adversary system,

and will offer some prospective improvements to it as a method of determining the truth.

Commentators: Mr. Justice D.C. McDonald, Supreme Court of Alberta. Mr. Justice McDonald is President of the Canadian Institute for the Administration of Justice, and a frequent commentator on the law of evidence and other issues.

E.N. McKelvey, Q.C., a practising lawyer and former President of the Canadian Bar Association. Mr. McKelvey will bring to the conference the viewpoint of a lawyer with wide experience in litigation on the issues of the judge in the adversary system.

Professor S.N. Lederman, Osgoode Hall Law School, will chair this session.

Topic V 11 a.m. to 12 noon

The Judge and Court Administration

Speaker: Professor G.D. Watson, Osgoode Hall Law School. Professor Watson has recently been engaged in research into court administration across Canada, with particular emphasis on pre-trial proceedings. He will disclose the results of his research to the conference.

Commentators: Chief Justice Gordon Cowan, (Trial Division) of the Supreme Court of Nova Scotia. Chief Justice Gordon will relate to the conference many important innovations he has brought about in the courts of Nova Scotia, and provide a judicial perspective on Professor Watson's views.

Robert Normand, Deputy Minister of Justice of Quebec. Mr. Normand has recently released a report on the administration of justice in the province of Quebec and will bring the perspective of a government official to the discussion.

This session will be chaired by Professor S.M. Beck, Osgoode Hall Law School.

Topic VI 3:30 to 5:30 p.m.

The Judge and the Public

Speaker: Professor Gordon Borrie, University of Birmingham, Director of the Institute of Judicial Administration. Professor Borrie is the author of a book on the law of contempt and will outline to the conference some of the major issues of recent years concerning this aspect of the law.

Commentators: Associate Chief Justice J.K. Hugesson of the Superior Court of Quebec. Associate Chief Justice Hugesson has been involved with a number of important cases in Montreal, including the trial of Dr. Henry Morgentaler and the contempt citation of federal cabinet member André Ouellet.

Paul Nejelski, Director of the Institute of Judicial Administration in New York. Mr. Nejelski will recount recent events in the United States with regard to public scrutiny of the courts, and public commentary on judicial decision-making.

Farrell Crook, a legal journalist and Canadian Bar Association St. Laurent scholar. Mr. Crook will present the journalist's view on this topic, with particular reference to his recent coverage of the Demeter murder trial in Ontario.

Mr. Justice Brian Dickson of the Supreme Court of Canada will be the special guest and commentator of the conference. He will offer comments on several of the foregoing topics, with reference to the way in which they affect his work in the Supreme Court of Canada.

There is no charge for the conference, although there is a charge for dinner on February 26 and for lunch the following day. For further information, contact the conference secretary, Madeleine Smith, at 667-3996.