CHEMSAF NEWSLETTER

VOL 02/99

ALCOA'S Donation Replaces Old APPLIED CHEMISTRY LAB

The Old Applied Chemistry building which was the first home of Applied Chemistry classes in the seventies will be replaced and refurbished thanks to a generous donation of US $60,000 by Alcoa Minerals of Jamaica.

CHEMSAF learnt of the plight of the Unit Operations Laboratory which is now in temporary accommodation and immediately made representation on behalf of the Chemistry Department to the ALCOA Foundation, which responded favourably.

Principal of the **University of the West Indies**, Mona campus, **Professor Kenneth Hall** (right) accepting an **ALCOA Foundation** donation of US$60,000 from **Dr. Conrad Douglas** (left) President of **CHEMSAF.** Others looking on (from left) are: **Mr. George Morgan, Environment Health** and **Safety Manager** at **Alcoa Minerals of Jamaica** and **Professor Tara Dasgupta, Head of the Department of Chemistry**

A photograph of the Old Applied Chemistry Laboratory which housed Applied Chemistry classes and Unit Operations Laboratories from 1970 until 1988 when it was badly damaged by Hurricane Gilbert. Temporary accommodation has been used since.

The grant, which will be disbursed over two years, will go towards the building and refurbishing of a laboratory and lecture theatre for the department's Applied Chemistry and Food Chemistry programmes.

Speaking at a recent presentation ceremony on the Mona campus, Environment Health and Safety Manager at Alcoa Minerals of Jamaica, Mr. George Morgan said that his company had been pleased to assist due to the close links which existed with the University. He said his company had used the expertise of the UWI staff in various areas and looked forward to continued collaboration with the institution.

CHEMSAF's president, Dr. Conrad Douglas, presented the cheque to the principal of UWI, Mona, Professor Kenneth Hall. He noted that preliminary designs for the structure were already in preparation. Dr. Douglas reaffirmed the commitment of CHEMSAF to the Chemistry Department and said a major objective was the investment in human resources. In response, Professor Kenneth Hall expressed sincere appreciation for ALCOA's generosity.

The Mission Statement of CHEMSAF

"To promote Chemistry and its contribution to development by assistance to the teaching and research undertaken at the University of the West Indies, Mona, by maintaining sound relations between graduates and strategically related industries"

Aims and Objects of CHEMSAF

To raise funds for the growth, development and maintenance of the Department of Chemistry of UWI, Mona.

To meet with the academic Staff of the Department of Chemistry to assist in the development and promotion of research projects and execution of fund raising activities.

To facilitate, stimulate and develop interest in national chemico-economic planning.

To collaborate with other organisations whether governmental, non-governmental or private to promote the teaching of chemistry.

To collect disseminate and circulate information and literature among alumni and friends of the Department of Chemistry, UWI Mona.

To promote goodwill, confidence and fellowship among alumni and to encourage the growth of the alumni movement

To establish and maintain friendly relations with overseas alumni of the Department of Chemistry, UWI, Mona as well as promote international goodwill and intercourse.

To do all things as are incidental or which may appear desirable or which the Association may consider conducive to the furtherance or attainment of the above objects.

CHEMSAF Publication Staff

Editor & Design *Sonya Allen*
Co-Editor and Layout *Patrick Duncan*
Print to Press *Hawthorne Watson*

Contributors: Robert Lancashire (UWI Chemistry Dept)
Ken Magnus

Please send letters, comments, articles etc to

The Editor
CHEMSAF NEWSLETTER
Dept of Chemistry
University of the West Indies
Mona, Kingston 7, Jamaica WI

Council of Management

Prof. Ken Magnus

Dr Conrad Douglas

Dr. Novelette Sadler-McKnight

Mr. James Rawle

Mr. Devon Gardner

Miss Sonja Allen

Mrs Joy Spence

CHEMSAF COMMITTEES

FUND RAISING and PROJECTS
Dr. Conrad Douglas, Mr. James Rawle and Dr. Novelette Sadler-McKnight

MEMBERSHIP
Mrs. Ann Marie Smith, Mrs. Deon Reitzin and Miss Lilieth Nelson

INFORMATION and PUBLIC RELATIONS
Miss. Sonja Allen, Mr. Hawthorne Watson and Mr. Patrick Duncan

Point of view

NOTES on the Chemical & Process Industry of Jamaica

Dr Conrad Douglas

Every modern industrial economy depends on a strong vibrant chemical sector for its support and further development. This stems from the fact that chemicals are required in one form or another to supply man's needs for food, clothes, shelter, healthcare, education, transportation, communication, recreation and leisure.

The widespread and varied demand for chemicals is rooted in the fact that matter in all its forms, its transformation and the energetics associated therewith is the purview of the chemist.

Although Jamaica's chemical sector is relatively underdeveloped, the profile of this industrial sub-sector indicates that the major elements of a sub-structure has been in place for sometime and could be developed and expanded to catalyse further industrialization. This brief note highlights some of the nodes in Jamaica's chemical industrial system.

Sulphuric acid, a key indicator of the degree of industrialization of any society may be an appropriate chemical with which to start. Commissioned with an installed capacity of 10 tons per day (tpd); ALKALI ltd established a sulphuric acid plant over 30 years ago which has been expanded to a capacity of over 100 tpd. The plant also makes water treatment grade aluminium sulphate and oleum. In addition a salt refinery is located on this chemical complex. The facility supplies the needs of several local industries such as alumina, water treatment, battery, ice production, detergent, electricity generation and others.

Lime, which is the cheapest alkali known to man, and has the most diverse end use structure of all materials used by mankind, is also a key indicator of industrial development. Jamaica has been producing lime on a relatively small scale for several decades, with the bulk of the country's production being an integral part of our alumina industry. Two external plants are located at Chippenham Park, St. Ann and Maggotty in St. Elizabeth respectively. Jamaica's lime products industry is nowhere near its potential. Cement production was started in the early fifties and supplies all the needs of our building construction industry. The production of gypsum is as old as these operations. More recently a gypsum based plant, producing sheeting has been established. The production of ceiling tiles from gypsum has been carried out for sometime now.

Glass bottles and various types of plastic products have been manufactured locally for many years.

There are various paint manufacturing plants as well as plants engaged in the production of adhesives.

Various industrial and medical gases have been produced for many years to meet local needs.

The production of sugar, molasses and rum is our oldest industry. Other sugar cane derived products and value added commodities remain to be fully explored.

A petroleum refinery was established in the sixties and supplies several petroleum products.

Several other industries have been established over the years. These include: edible oils and fats, pharmaceuticals, essential oils, food processing among others.

A brewery for the production of beer and several soft drinks and bottling plants have been in operation for decades.

By far Jamaica's largest industry has been the bauxite-alumina industry, which was established, in the late forties. There is still scope for the production of specialty products.

While Jamaica's chemical sector is largely underdeveloped, there are many major elements which offer the prospect for further development through the synergy of materials, the abundance of indigenous resources and seizing value added production opportunities where we enjoy competitive advantage**.**