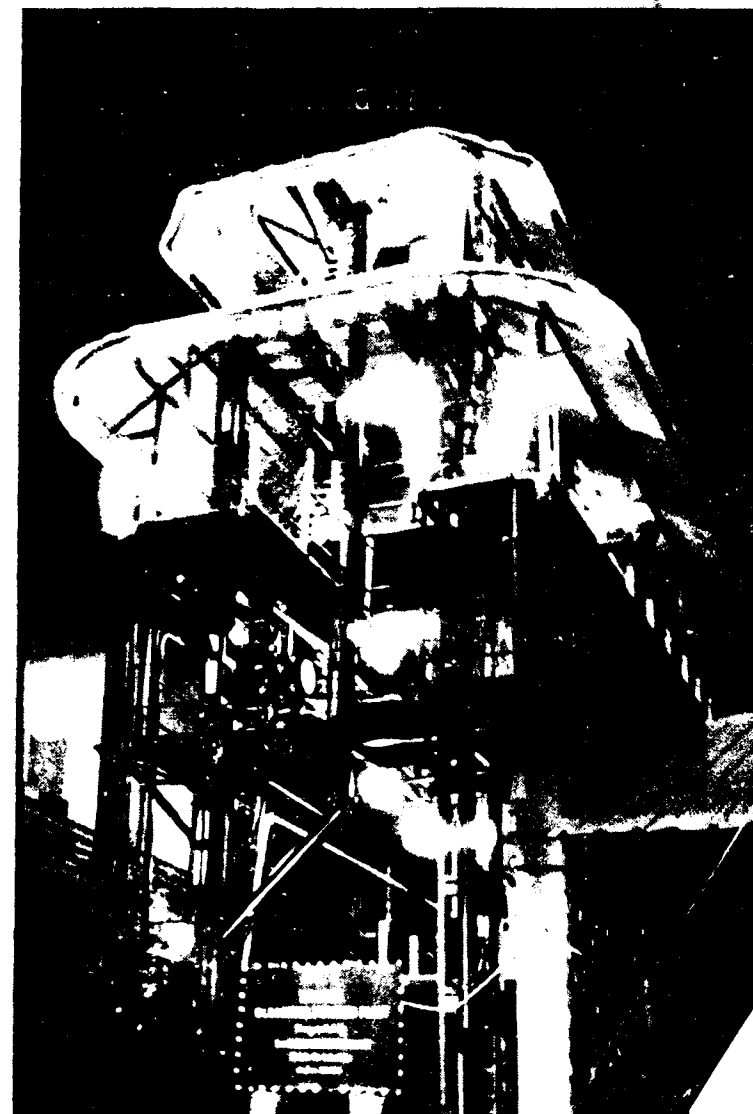


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Metkem Journal

THE NEW PLANT for the manufacture of stable bleaching powder which was declared open by Mr. M. Bhaktavatsalam, Minister for Industries, Madras State, on January 20. Picture presents a view of the gaily illuminated plant with the inauguration plaque in the bottom bay.



METKEM Journal

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In this Issue

STABLE BLEACHING POWDER PLANT — OPENING
FUNCTION

QUALITY CONTROL IN
CAUSTIC SODA INDUSTRY

AND

OTHER USUAL FEATURES.



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What a function! Opening of Stable Bleaching Powder Plant

(1) N January 20, Mr. M. Bhaktavatsalam, Minister for Industries, Madras State, pressed a button to add a glorious, new chapter to India's industrial history. For, on this memorable date, the country formally commenced making STABLE BLEACHING POWDER. And our company—the METTUR CHEMICAL & INDUSTRIAL CORPORATION LIMITED—by being the instrument of production of a basic and essential chemical added a fresh laurel to its brow.

A large and distinguished gathering was present at the opening function including, among others, Mr. R. Venkataraman, Member of the Lok Sabha. The opening ceremony, a glittering and heart-warming one, will long remain inscribed on the tablets of our memory. About the details which went to make the function such an unqualified success, we shall deal later.

Declaring open the new plant Mr. Bhaktavatsalam observed that with the production of stable bleaching powder in the country, yet another milestone on the road to industrial progress had been reached.

Mr. Bhaktavatsalam also paid a glowing tribute to the pioneering genius and enterprise of Mr. V. Seshasayee in developing the chemical industry.

Continuing, the Minister observed that stable bleaching powder would be particularly useful to the handloom industry and several other small industries. The Second Plan envisaged all-round development of big and small industries with the exploitation of Salem bauxite, iron ores, etc., and with the possibilities of utilising Neyveli lignite, the future looked very bright indeed.

The Minister, also, disclosed that the State was seriously contemplating the establishment of its own geological

(1) Mr. R. Venkataraman, M.P. (2) Mr. K. K. Raman,
(3) Mr. S. M. AR. N. Arunachalam Chettiar, (4) Mr. V. Seshasayee,
(5) Mr. S. Vaidyanatha Iyer, (6) Mr. J. Sharples and
(7) Mr. R. Natarajan.



survey team for investigating and exploiting the possibilities of harnessing the rich and extensive mineral deposits of bauxite, iron, magnesium and other potential ores found in abundance all over the district of Salem for purposes of planned industrial development during the Second Plan period. He stated that vast employment opportunities would open up as a result of the chain of industries that would be forged both in the private and public sectors.

Earlier, Mr. K. K. Raman, Director, welcomed the gathering and Mr. S. Vaidyanatha Iyer, Chairman, Board of Directors, presented a special address of welcome to the Minister. The address was enclosed in a beautiful sandalwood casket. The Chairman stated in his address that the new plant used a German press specially licensed to MCIC, enabling the company to produce for the first time in the country stable bleaching powder. The shelf-life of the ordinary, tropical variety of bleaching powder was short, whereas stable bleaching powder would permit of extended storage, he said. He added: "The principal

(1) The school girls singing a welcome song. (2) An animated flow-sheet showing how SBP is made. (3) Mr. M. Bhaktavatsalam, Minister for Industries, (fourth from right); in the picture can also be seen Mr. V. Seshasayee (second from left) Mr. Vaidyanatha Iyer (next to the Minister) and Mr. K.K. Raman, (extreme right) and others.

raw material was limestone which was abundantly available in the district of Salem. The other raw material, common salt, from which chlorine was made, was obtained from Tanjore and Tirunelveli Districts ”.

Mr. R. Natarajan, Secretary, read the messages of good wishes received on the occasion, from among others, Mr. Sri Prakasa, Governor of Madras, Mr. K. Kamaraj Nadar, Chief Minister, Mr. Nithyananda Kanungo, Union Industries Minister, and Messrs. Friedrich Uhde, German suppliers of the plant.

Those to offer felicitations in person were : Mr. R. Venkataraman, M. P., Mr. J. Sharples, Manager, Mettur Industries—makers of the well-known Mettur mull and long cloth—an esteemed customer of the company, Mr. S. M. AR. N. Arunachalam Chettiar and Mr. K. M. Subbiah, Distributors.

Mr. V. Seshasayee proposed a vote of thanks.

Now for those details which contributed to the success of the function.

First of all, mention should be made of our invitations, of which over 2500 had been sent to friends all over the country and abroad. The cards were printed in gold on beautiful, milk-white, hand-made paper.

In addition to Mr. Raman's welcome speech and Mr. Vaidyanatha Iyer's formal welcome address, a welcome song — a lovely, little lyrical piece — was sung by a bevy of little girls from the school run by the Company. This item was very well-received, indeed, the Minister himself giving it a big hand.

A well-decorated *shamiana* had been put up for seating the guests. At the main entrance, and at the special entrance to the venue of the function,

beautiful welcome signs, including an illuminated one, had been put up. On the podium where Mr. Bhaktavatsalam, Mr. Vaidyanatha Iyer, Mr. Seshasayee and Mr. Raman were seated, were two large-size display stands. One contained the announcement : “ Now ! Made in India for the first time. STABLE BLEACHING POWDER (containing available chlorine of 35 to 37 per cent).” The other stand was an animated flow diagram consisting largely of colour transparencies showing how stable bleaching powder was made.

The bottom bay of the new plant had been draped with a custom-built, yellow *khadi* curtain, decorated with *nandi* (temple bull) motifs. And as Mr. Bhaktavatsalam pressed a button, this curtain gracefully slid back disclosing the new plant.

A quarter of an hour before the function started, an “ information packet ” had been placed in each guest's chair. This packet contained (i) a copy of the welcome address of the Chairman ; (ii) a general booklet about the Company—“ The Story of Mettur Chemicals ”; (iii) a brochure about the new plant and the product ; (iv) a special issue of METKEM, and (v) a small quantity of stable bleaching powder in an alkathene bag.

Press coverage of the function was as adequate as could be hoped for ; especially the MAIL had sent in its News Editor to report the function. A big-size advertisement headed “ STABLE BLEACHING POWDER ... *On stream !* ” appeared in all the important dailies of the country on the date of formal opening.

Altogether, as we said earlier, it was a thoroughly heart-warming ceremony.



Quality Control

in

Electrolytic Caustic Soda Industry *

QUALITY is the ability of a product to conform to certain specifications, and control is the technique of regulating the manufacturing process to maintain the standards prescribed for the product. As in every other industry, standardisation and quality control are important in the electrolytic caustic soda industry, so that wastage is reduced and maximum efficiency is obtained. Caustic soda, liquid chlorine, bleaching powder and hydrochloric acid are a few of the more important products of the Indian electrolytic caustic soda industry. The Indian Standards Institution has already drawn up standards for most of the products, these being IS : 252—1950 Caustic Soda, IS : 295—1951 Bleaching Powder, IS : 265—1950 Hydrochloric Acid, etc.

PROCESS

In the electrolytic process of manufacture of caustic soda and chlorine employing diaphragm type cells, purified common salt solution is continuously electrolysed between graphite anodes and iron cathodes. Chlorine is obtained at the anode and caustic soda and hydrogen at the cathode. The anode and cathode products are kept separate by means of an asbestos diaphragm. Only a part of the salt is electrolysed during the passage of the salt solution through the cell. The weak caustic liquor along with the unelectrolysed salt flows out

of the cell and is concentrated in multiple effect evaporators. The bulk of the unelectrolysed salt separates out in the evaporators and is returned to the brine system after it is washed free of caustic soda. The concentrated caustic liquor or thick lye as it is commonly called, contains dissolved salt to the extent of about 1.25 to 1.5 percent by weight. The thick lye is fused in cast iron pots to obtain solid caustic soda.

In this paper, the Mettur Chemicals has been taken as a typical unit of the electrolytic caustic soda industry for describing quality control methods. All raw materials as well as samples at intermediate and finished product stages are sent to a main control laboratory for careful check and evaluation. In addition, a control laboratory is attached to practically every section of the factory, where process materials and intermediate products are analysed at regular intervals.

A most important process control feature is the quality of brine fed to the cells. Normally, feed brine to the cells should have the following analysis :

- (a) NaCl : 300 to 320 GPL
- (b) NaOH (Excess) : 5 to 100 lbs. per 1,00,000 gls.
- (c) Na₂CO₃ (Excess) : 300 to 600 lbs. per 1,00,000 gls.
- (d) Na₂SO₄ : Up to a maximum of 20 lbs. per 1,000 lbs. NaCl

* Being a paper presented at the Chemical and Textile Standards Convention in January. Mr. S. Ramaswami is Production Superintendent and Mr. N. Kalyanam is a Research Chemist with MCIC.

During electrolysis, the graphite anode is consumed due to mechanical and chemical actions occurring inside the cell. The graphite consumption is however minimum at maximum current efficiency. Since the current efficiency of the cells decreases with the lowering of NaCl concentration, brine concentration is of supreme importance in controlling anode attack. The brine should be saturated with NaCl and free from impurities like calcium and magnesium. Brine at 60 deg. C with a NaCl concentration of 320 GPL is ideal but in regular plant operations 295 to 310 GPL is considered as normal sodium chloride concentration.

A small quantity of sulphate can be present as impurities as it has no large harmful effects. However large amounts of sulphate increase the anode attack. The sulphate passes through the cell practically unaffected and is recovered along with the un-electrolysed salt which is returned to the brine system. The recycling of salt increases the sulphate concentration in the brine. To keep down the sulphate concentration, the salt recovered from the evaporators is washed. A wash liquor rich in sulphate is obtained which is discarded. The salt after washing is returned to the brine system. A maximum of 15 to 20 lbs. of Na_2SO_4 per 1,000 lbs. of NaCl is considered as limit for sulphate in feed brine.

In Fig. 1 are shown the sodium chloride and sodium sulphate contents in the feed brine to the cells during a period of three months. In the case of NaCl, points above line 'aa' indicate an improvement in quality. In the case of Na_2SO_4 , the reverse is the case,

and points above 'aa' indicate that washing of salt from the evaporators is imperfect and needs attention.

QUALITY CONTROL

Caustic Soda: Caustic soda made from the diaphragm cell contains a small quantity of salt as impurity. The ISS for caustic soda stipulates for commercial grades that the maximum limit for NaCl and Na_2SO_4 shall not exceed 3 per cent. (It is understood that this has been subsequently modified to 2.5 percent, thereby further improving the quality of the product). For ensuring this quality, the caustic liquor that is fed to the fusion pots should have a high concentration of NaOH and a low salt content. Suspended salt in the feed caustic liquor is removed by cooling and filtering. One important phase of process control in ensuring quality of the finished caustic soda is the analysis of the liquor for NaOH and NaCl every time the liquor is fed to the smelting pots. Figure 2 gives the NaCl contents per 100 parts of NaOH, in the feed liquor during a three-month period and Figure 3 gives the purity of the fused caustic soda, for the same period. In the case of NaOH, points above 'aa' indicate an improvement in the quality. But in respect NaCl, improvement of quality is denoted by points falling below 'bb'.

Bleaching Powder: Bleaching powder is made by absorbing chlorine in slaked lime powder. An important aspect of this product is its stability—that is, capacity of the powder to retain its available chlorine content on storage. A good quality powder loses

only a little of its available chlorine with time. At present only unstable variety of bleaching powder is produced in India which does not have good storage property at all. But, soon stable bleaching powder will also be produced when the new plant, now under erection at Mettur Chemicals, goes into production. (The plant has since been commissioned. *Ed.*)

The stability of bleaching powder is a complex problem and several factors are responsible for the poor stability of the product. It has been found, for instance, that the higher the percentage of available chlorine in the powder, the greater is the loss. A powder with 28 to 32 per cent available chlorine at the time of manufacture is considered as a satisfactory product. In plant process control, the available chlorine concentration of powder is determined every hour. The progress of chlorination is also followed by estimating the total chlorine contents. A large difference between available chlorine and total chlorine in the powder shows increased CaCl_2 formation and a poorer product. This is corrected by regulating the chlorine supply. Fig. 4 gives the available chlorine concentration of bleaching powder for a period of three months. In this case, a satisfactory product is indicated only by points between 'aa' and 'bb'.

Points above 'aa' show that the product obtained will have a poor stability, though initially having higher chlorine content.

STATISTICAL APPROACH TO QUALITY CONTROL

A close control of the process has to be exercised at successive stages to maintain standards of production in the electrolytic caustic soda industry. The importance of applying statistical quality control methods during the various stages cannot be overestimated. But in this country as elsewhere, statistical quality control methods have been confined more or less to mechanical processes. Because of the number and complexity of variables in the Chemical Industry, application of this method is rather restricted. However, efforts have to be made to extend the technique to the chemical industry. In this connection, mention may be made of the good work that is being done by the ISI and the Indian Society for Quality Control and the different regional Statistical Quality Control units. It is to be hoped that within a reasonable time statistical quality control methods will be increasingly adopted by the Indian Chemical Industry resulting in better and greater production.



*Mr. T. T. Krishnamachari,
Union Minister for Commerce
addressing the gathering.*

UNDER the auspices of the Indian Standards institution, a Chemical and Textile Standards Convention was held in Bombay between January 10 and 14.

Inaugurating the Convention, Mr. T. T. Krishnamachari, Union Minister for Commerce and Industry, paid a tribute to the Indian Standards Institution as "the greatest co-operative organisation in India" in the economic field, promoting standards for "the betterment of trade, commerce and industry."

Stressing the need for building up a reputation for standards and quality and economy in whatever we do or whatever we produce, the Minister pointed out the scope that existed for the development of the chemical industry, following the country's plans to expand steel production.

Chemical & Textile Standards Convention

Representing the Mettur Chemical and Industrial Corporation Ltd., Mr. N. Kalyanam and Mr. M. Padmanabhan attended the Convention. Two papers were presented by them. (1) "Some aspects on the method of sampling and analysis of marine salt" and (2) "Quality control in electrolytic caustic soda industry." (The latter paper is published elsewhere in this issue.)

A section of the audience: Mr. M. Padmanabhan is second from left (first row) and N. Kalyanam is first from left (second row).





The Alwaye Excursionists: Second from right is Mr. L. R. Krishnamurthy of T. C. C. Ltd., genial host who took such good care of the party.

Westward Ho!

by T. S. SUBBA RAO

THE members of the Society of Technologists, MCIC, went on an enjoyable and useful excursion to Alwaye, in the third week of February.

The party left Mettur Dam by train and were given a hearty (?) send-off by those left behind. Catching the Cannanore Passenger at Salem, the members of the party got into a small compartment. They managed to snatch some sleep by turns, though four or five of them held an all-night session in rummy, right up to Shoranur. It was a glorious, "never-to-come-back" opportunity (the money never came back!) for them. Reaching Alwaye at 8-45 a. m., we boarded the special bus that had been arranged for us, and arrived at the FACT Guest House.

We then began our busy rounds of visits to the several factories, in and around, Alwaye. The first and second in the list were, of course, the Fertilisers and Chemicals, and the Travancore, Cochin Chemicals, which we finished "doing" on the very day of our

arrival. The next day—that is, on Feb. 20, we visited the Ogale Glass Works, the Indian Aluminium Company, the works of Standard Potteries, and the Travancore Rayons.

We left for Ernakulam (by bus) on the morning of Feb. 21. The Tata Oil Mills was finished by us in the forenoon. From there we went to Wellington Island, Cochin, in a motor-boat, and drank in the beauty of the back-water scenery of Cochin. We saw the Harbour and also went aboard a German cargo ship berthed there and had a "dekko" at its engine room.

We boarded the Cochin Express the same day and returned to Mettur on Feb. 22, not sadder, but definitely wiser, after a somewhat strenuous programme.

A number of friends helped to make this trip a memorable success. First and foremost among them should be mentioned, Mr. L. R. Krishnamurthy and Mr. A. R. Narasimhan of T. C. C. who, from the time we arrived at Alwaye to the time we left

were with us in the flesh (LRK, very much so) looking after us and our comforts. They put themselves to much unnecessary physical trouble for our sake, despite the pressure of their official duties. Mr. C. P. Rangarajan had made excellent arrangements for our boarding, lodging and transport. We would like to render thanks to FACT for placing its spacious, well-equipped Guest House at our disposal.

Wherever we went, we met with unflinching courtesy. Our special thanks are due to the authorities of TOMCO for lending us their motor boat for a short trip.

And coming to our own party, we would be failing in our duty if we did not mention the useful work of our own strong, silent and business-like Secretary Mr. M. Padmanabhan and our energetic and joy-radiating President, Mr. K. Ramnathan. The arrangements for the various visits, meals, tiffin, lodging, transport, etc., left nothing to be desired. This statement does not go for the meals and tiffin—they left everything to be desired and were simply delicious! Mr. T. A. Javanthinathan seemed to be *persona-grata* with the entire Railway organization; so tiffin or food between stations was no difficulty at all.

To MCIC, we owe thanks for permitting this party to go on this excursion and for agreeing to meet a part

of the trip expenses. Mr. C. L. Seshadri, Foreman, FACT, a former colleague, gave us "Tea" in his house. He said that he had deliberately made it a small party, but if the sumptuous fare to which he treated us constituted his idea of a small party, we would not know a big party when we met one!

Vidwan T. K. Sitaraman (Diploma in Indian Music and of A. I. R. fame) entertained us with music on the train journey.

It will not be an exaggeration to say that Mr. K. Ramnathan was as usual the life and soul of the party and he was at his best ever. He shot us all with his new German 8 mm. cine-camera, conferring on us celluloid immortality. Taking a "group" on board the German cargo ship, he included two members of the ship's crew saying that he would give them copies of the photos to be sent to their *frau* friends back home in Germany!

While in Alwaye, a member of the party went one evening to the FACT Club with two friends and finding only the marker there played three games of table tennis with him, but won only one. This is "News" with a capital 'N' (like man biting dog) because the player who was well and truly licked was Mettur's No. 1...and yours very truly!

METKEM Miscellany

Development Council Meeting: The fourth meeting of the Development Council for Heavy Chemicals (Alkalies) set up by the Ministry of Commerce and Industry, Government of India, was held at Mettur and Alwaye between Feb. 12 and 15. The following members of the Council participated in the discussions at Mettur:

Messrs C.R. Rao, Kantilal M. Sheth, B. Maitra, K. K. Raman, A. R. Narasimhan, Surotham P. Huthee Singh, N. Adhikari, K. B. Shah, Biswanath Roy, G. P. Kane, A. Joga Rao, K. Viyasulu and P. K. Seshan.

The Council considered the details of the work to achieve the targets set for the alkali industry in the Second Five-Year Plan period. Steps to achieve efficiency in the industry by elimination of waste, standardisation of products, etc., were discussed.

Meetings of the Society of Technologists: Dr. A. Nagaraja Rao, Chief Industrial Adviser to the Government of India addressed the Society on December 25, 1955, with Mr. K. K. Raman in the chair. Dr. Nagaraja



The Fourth Meeting of the Development Council for Heavy Chemicals was held at Mettur. Picture shows Members with some of the officials of MCIC.

Rao said that industrialists and Government should understand each others' point of view and work towards the advancement of the industries. He was all praise for original work in the field of chemical technology, but he pointed out that rather than start

National Volunteer Force Passing-out Parade. Mr. Prager presenting the rolling shield instituted by MCIC for the Division best in turn-out. Capt. Bhaskaran, O. C. Ninth N. V. F. Training Team and Mr. R. Balasubramanian, I.A.S., Collector of Salem, can, also, be seen in the picture.



MCIC employees who took training in the National Volunteer Force Training Camp.

everything from fundamentals, it was better and quicker to start on the basis of available scientific knowledge and to improve upon it.

The Society accorded a reception to the Members of the Alkali Development Council, Ministry of Commerce and Industry, Government of India, on February 12. K. Ramnathan, President of the Society, welcomed the Members of the Council and requested them to address the Society.

Mr. C. R. Rao, President of the Council, said that the Council was constituted by the Union Government to advise on industrial matters. It was the duty of the Members of the Council, he said, to recommend to Government what the country required, and what measures had to be taken in the interests of the country.

Dr. G. P. Kane, Industrial Adviser (Chemicals) to Government, said that it was their main aim to suggest measures to bring down the cost of basic chemicals, so that the industries largely dependent on them could also thrive well. They were also trying to recommend methods for fuller utilisation of the raw materials so as to bring down costs; yet another objective was to evolve the size of an economic unit from time to time so that new units could be planned to meet the increasing needs of the country.

Mr. K. Viyasulu, Director, Planning Commission, said that there had been a definite improvement in the economic sphere since 1951, the year in which the first Five-Year Plan was evolved. He envisaged bright prospects for the development of major industries in the southern region with the exploitation of the lignite project at Neyveli.

Mr. K. B. Shah, Secretary, I.N.T.U.C., Rajkot, (Saurashtra) said that trade union activity in India had changed its phase and that labour, staff and management were able to work in close co-operation for the common good.

Mr. K. K. Raman said that in several industrial organizations such as MCIC, labour was given all facilities and amenities and employer-employee relations were quite cordial.

* * *

On February 16, Mr. T. Hanada, Statistical Quality Control Expert and Management Consultant, addressed the Society. Mr. S. Ramaswamy who presided mentioned the useful work done by the Quality Control Unit, Bangalore, in popularising the technique of Statistical Quality Control.

Mr. Hanada dwelt in his address on the different types of sampling such as unrestricted random sampling, systematic sampling, zigzag sampling, etc., and emphasised the need for adopting the right technique for any specific job. He then spoke on the application and importance of statistical quality control in the chemical industry. Taking the data available from one of the units in MCIC he showed how the data could be studied by the SQC method and improvements effected.

* * *

On February 28, Mr. Rama Rao, Mr. Murthy, Mr. Dayal and Mr. Mathur of the Atomic Energy Department, addressed the members of the Society. Mr. Murthy spoke on the general principles of geology, Mr. Dayal described the instruments used for detecting radio-active materials, and finally Mr. Rama Rao described how one could prospect for uranium and how it could be recovered from the ore.



Members of the Development Council for Heavy Chemicals went round the various sections of our works. Mr. K. K. Raman can be seen first from left.

National Volunteer Force: The following employees of MCIC took training in the National Volunteer force during the camp conducted by the No. 9 Training Team at Mettur between January 11 and February 9, 1956:—

K. Gopal, S.L. Narasimhan and Manoharan (Electrical Section), C. Shanmugham (C. F. M. G.), P. R. Venkateswaran and K. A. Arumugham (Accounts), and Kolandasami and Raju (Apprentices in work-shop).

It may be mentioned in this connection that the object of the N. V. F. is to get people interested in national service and inculcate in them a sense of discipline and self-reliance. The trainees have no liability for military or any other kind of compulsory service, but they have to be prepared to serve the nation in any emergency

such as earthquakes, floods, etc. The training follows the pattern of training in the Auxiliary Territorial Force which has been replaced by the National Volunteer Force, and it includes such subjects as firing of service rifles, field engineering education, first aid, hygiene, drill, physical training, etc.

Thirty-four training teams are operating in India, each of which organizes six camps in a year. In five years beginning from May 1955, five lakhs of persons would have been trained by this Force.

The camp at Mettur was inaugurated on January 11, by Mr. R. Balasubramanian, I. A. S., Collector of Salem. The camp concluded on February 9, after a strenuous month of training, and conducting tournaments in sports and games. Five-hundred trainees took part in the camp.

A rolling shield instituted by MCIC was awarded to the best division for efficient turn-out.

The "passing-out-parade" of the trainees was held on February 8, when Mr. R. Balasubramanian, I. A. S., took the salute. The Salem Police Band was in attendance on the occasion.

Captain Bhaskaran, Officer Commanding, read a report and thanked

the district officials and the citizens of Mettur for the interest evinced by them and the co-operation extended to his team for the success of the camp. Prizes were then distributed by Mrs. Prager to the winners in the various competitions. The following trainees from MCIC got prizes:

P. R. Venkateswaran—
First prize in Drill.

K. A. Arumugam—
First prize in physical training.

Gopal and Balu—
(as members of the winning team in Volleyball).

Staff Association Annual Day: This function synchronised with the opening of our new Club House by Mr. S. Vaidyanatha Iyer, Chairman of the Board of Directors, on January 21. Mr. T.M. Krishna Rao, Vice-President of the Association, thanked the Company for the "gift" of the club house. Mr. Vaidyanatha Iyer said that he was happy to associate himself in the function. He assured the Association of the Company's constant support in their good work. Mr. V. Seshasayee paid a tribute to Mr. S. Vaidyanatha Iyer for the kindly interest he had always been taking in employee welfare. Mr. M. K. Rajagopal, Secretary, read the Annual Report and Mr. R.V. Ramani, Secretary, proposed a vote of thanks.

The function closed with a drama in Tamil—*Kamali*—a review of which appears in the Tamil section.

Election of Office-bearers : The general body of the Staff Association which met on January 28 adopted the accounts for 1955. The Vice-President of the Association outlined the achievements of the outgoing committee, such as the construction of a club building, opening of a second tennis court, and the staging of the "Independence Day" tournaments. When the next and the usually-interesting item, election of office-bearers for the current year, was taken up, there was absolute silence for some time. Then came a resolution for re-electing the outgoing Committee for another term, which was at once supported and passed unanimously by the House! As the Vice-president said they had come prepared for a rather long session, but the meeting was unexpectedly over in the record time of 15 minutes. The entire Committee was re-elected with Mr. O. S. Natarajan also coming in the place rendered vacant by the departure of Mr. V. Vaidyanathasamy.

'Tamil & in foreign countries': This was the subject of a lecture by Mr. A. K. Chettiar, the well-known world-traveller, and Editor of *Kumari Malar*. The lecturer spoke about the contributions made by emigrants from Tami Nad to the prosperity of countries in which they had settled



Sowbhagyavati Maragathalakshmi and S. Renganathan.

down. Mr. R. Natarajan, Secretary, presided.

Workers' Dramatic Club : Members of the *Muthamizh Nataka Manram* put on boards a Tamil play '*Tilakavin Teera Thuyaram*' on Jan. 22.

Wedding : The wedding was recently celebrated of Mr. M. A. Shanmugham, Accountant, M.C. Co-operative Stores, with Miss Kalyani.

Mr. N. V. Rangaswami Iyengar, Driver, MCIC, celebrated the marriage of his daughter Miss Maragathalakshmi with Mr. S. Renganathan B.A., (Hons.) S. A. S. Apprentice, and the *upanayanam* of his son Lakshminarasimhan on March, 21.

Film Club : Films screened in recent months included :

Summer Holiday, Wild North, A day at the Races, Across the wide Missouri, Singing in the rain, Devil's brother, There go the boats, Voices under the sea, F. A. Cup Final.

BOOK Reviews

SALT & WATER, POWER & PEOPLE: (A short history of the Hooker Electrochemical Company by Robert E. Thomas)

THIS book published by the Hooker Electrochemical Company of U. S. A. gives the history of its growth and development over a period of half-a-century. (1905—1955).

Like other chemical companies in the U. S., the Hooker Electrochemical also began modestly, but thanks to the vision and energetic work of the early pioneers, the company has diversified in its manufacturing activity so that to-day, it is one of the biggest, single, chemical units in the world.

To those of us connected with the alkali industry, this book is of special interest.

To start with, Hooker manufactured only two chemicals—caustic soda and chlorine. The chlorine was absorbed in slaked lime to yield bleaching powder. The early working conditions in the plant, which had a capacity of 5 tons caustic soda and 11 tons bleach, were none too good, largely due to

constant financial shortage, but they realised early enough that 5 tons was too small a capacity to prove profitable. So, in two years, they enlarged capacity to 20 tons caustic and 42 tons bleach. Their early caustic cell was the "Townsend Cell", where the cathode was sealed with oil and the hydrogen had to seep through the oil. The escaping hydrogen carried fine particles of oil which were deposited everywhere in the cell building. The cells did not work very efficiently and there were constant small fires inside the cell. On May 27, 1910 there was a disastrous outbreak of fire, resulting in the total destruction of their 20-ton plant, but, undaunted, they started rebuilding practically immediately afterwards, and their new plant was commissioned on October 24, 1910, in a little under five months of the accident. Finding that the Townsend cell was not satisfactory, Hooker's Chief Engineer C. W. Marsh designed the corrugated cathode, which is the forerunner of the modern Hooker cell. With these new cells, capacity was increased to 45½ tons per day by October, 1914.

The first World War gave the necessary impetus to American chemical industry to go into new lines of chlorine chemicals since German imports were cut out. Hooker also benefited by the situation, and by 1918, they were manufacturing fifteen new chemicals based on chlorine. From this period onwards, the rate of ex-

pansion was much faster. Quite accidentally, in 1920, it was observed that if there was oil in the cathode compartment, there was a higher voltage, and if the oil was reduced, voltage also was lower. Within a short time, oil was removed from all cells and this was the first fundamental change in the Hooker cell design. By 1929, Hooker established their second plant in Tacoma, Washington, this being the first chlor-alkali plant in the Pacific northwest. Expansion has been steady right through, and to-day, Hooker chlorine capacity is 700 tons per day. The modern Hooker cells have the high capacity of 30,000 A per cell and more, and are possibly the most efficient and most widely-adopted diaphragm cells in the chlorine industry to-day.

Hooker's relations with their labour have always been excellent. Characteristically enough, R. L. Murray, the present Chairman of the Board of Directors and Bjarne Klaussen, President, have dedicated the book "to the employees of the Hooker Electrochemical Co., without whose contributions the company could not have progressed."

We, at MCIC, have a connection with Hooker, which began back in 1947 when we decided to install a small number of Hooker cells to increase our capacity of caustic soda production. On the eve of Hooker's

completion of half-a-century of chemical activity, we would like to convey to this great American company our greetings and good wishes for their continued prosperity in the years to come.

—S. R.

RESEARCH & INDUSTRY: Edited by B. N. Sastri and published by the Council of Scientific and Industrial Research.

THE need for the dissemination of scientific and technical information for application of science to industrial development is now being increasingly recognized. This is good augury, indeed, particularly in the context of the vast development programmes taken in hand by Government. As a vital part of our nation-building programme, a number of national laboratories and institutes have already come to be established for the promotion of research. Thanks to the unremitting and enthusiastic work of these institutions, new discoveries and inventions are being made. These discoveries and inventions will lose their significance, if they do not find applications in industry for increasing productivity and for the improvement of existing processes. A suitable agency is, therefore, required for collecting technical information and presenting it to industry. The Council of Scientific and Industrial Research is the agency, and **RESEARCH AND INDUSTRY**, the vehicle for conveying this information.

The two numbers for January and February cover a variety of subjects of great importance and usefulness to industry. We welcome the publication and wish it many years of useful service.

—N. SUNDARESAN.

ION EXCHANGE RESINS:—By Robert Kunin and Robert J. Myers, Rohm and Haas Company, Philadelphia, Pennsylvania. Published by John Wiley & Sons, Inc., New York. Chapman & Hall, Limited, London.

THOUGH the knowledge of ion exchange as evidenced in the treatment of waters by solid adsorbents like sand is as old as civilization itself, what has given a fillip to the number of applications in such widely divergent fields as agriculture, biology, medicine and chemistry, is the recent appearance of high capacity and durable ion exchange resins. The authors have done well to devote sufficient space to an explanation of the theory and mechanism of ion exchange phenomenon and the characteristics of the cation and anion exchange resins. Ion exchange resins are generally high molecular weight polymers, anion exchange resins containing amine groups as integral parts of the polymer lattice and an equivalent amount of anions such as chlorides, sulphates, hydroxyl, etc., ions and cation exchange resins containing on the other hand, phenolic, sulphonic, carboxylic, phosphoric acid

groups as integral portions of the resin and an equivalent amount of cations. Certain basic requirements in order to synthesise ion exchange resins are described in detail, in this book.

Taking the illustrations of water softening, deionization and metal recovery, the authors have explained the design and instrumentation of some ion exchange units. Being practical men belonging to Rohm and Haas Company, Philadelphia, Pennsylvania, which is one of the leading manufacturers of commercial ion exchange resins, they have done more than justice in their descriptions of the applications of these ion exchange resins in processes, such as water softening, sugar refining and sea-water desalting. Applications of this wonderful technique in the field of analytical chemistry, for example, analysis of rare earth mixtures from a determination of the mean atomic weight of the rare earth mixture by the use of a sulphonic acid cation exchanger, recovery of valuable analytical reagents such as valuable platinum from waste potassium chloroplatinate precipitates obtained in potassium analyser in the laboratory and the preparation of a substitute for distilled water with the help of ion exchange resins — all these make quite interesting reading and are bound to kindle readers into exploring further possible uses of these ion exchange resins in many a new field.

—M. PADMANABHAN.

Our "M. P."

Mr. M. Padmanabhan, Senior Chemist, once won a prize from the editor of a monthly magazine for posing him a ticklish question. 'What is Platonic love', he asked the editor with engaging naivete. His reply: "Rocking the cradle while the sweetheart is washing the linen!" (...With Cauvery Bar Soap, perhaps! Ed. METKEM.)

But Padmanabhan has other claims to fame. Indeed, a profile of his is overdue in these columns. What has made it a "must" in this particular



issue is his successful organization of a busman's holiday to Alwaye, under the aegis of the Society of Technologists, of which he is Joint Secretary, and an able and energetic one at that.

Words like 'able' and 'energetic' have lost much of their savour and significance, because of much indiscriminate and venal use, but if ever the adjectives fitted any person just right, that person is Padmanabhan.

Padmanabhan took his B. Sc. from the Madras University as a student of St. Joseph's College, Tiruchi, his subjects being Chemistry, Physics and Botany. Joining MCIC in 1942, he spent his first two years in various sections of the factory. As he evinced a particularly keen interest in the analysis of materials in process and the products and in the interpretation of results, he was placed in charge of the main laboratory, and it must be admitted that he has been holding this fort with rare distinction.

His forte being analysis, it is little wonder that Padmanabhan is a member of the Association of Analysts and Analytical Chemists and the Statistical Quality Control Organization, (Southern Unit) Bangalore, at the meetings of both of which he has presented papers.

While at College, Padmanabhan's athletic side did not assert itself, but at Mettur it did. For instance, here,

M. Padmanabhan.



T. A. Javanthinathan.

he started taking such an interest in volleyball that very soon he became one of our regular prize-winners, indeed, he played the game so well that we made him our captain. He took to tennis only last year and before the umpire could sort of call "Love all" (in a Platonic way, of course!) Padmanabhan was seen to be walking away with the prizes.

He can put his shoulders to the wheels within wheels: Now, we come to another personality because of whose various, nameless, unremembered acts of kindness and love, the recent Alwaye trip of the Society of Technologists was a great success, and who is assisting Mr. Padmanabhan in the Laboratory—Mr. T. A. Javanthinathan.

Javanthinathan joined MCIC in 1945 as a Supervisor in the Soap Plant. He was educated at the Srirangam High School and later at the St. Joseph's

College, Tiruchi. He is the holder of a diploma in soap technology from the Kerala Soap Institute, Calicut—he also, studied oil technology for a brief period. From 1950 to 1952, Javanthinathan was with our Sales Division, and from 1953 onwards, he has been working in the Laboratory.

Javanthi is a very fine sportsman. At school and college, he had distinguished himself in several games. He was the general captain of his High School for five years, and the football captain for more years than he now cares to remember. Badminton, volleyball and cricket were other games in which he excelled, and running and shot-put, other events in which he took prizes in his school days. At Mettur, too, his prowess has been proved in games like volleyball, badminton and football, and sports events like shot-put.

In addition to all his known abilities Javanthinathan has an almost uncanny ability in one particular department, or this ability of his comes to surface in his handling of one department—namely, the Railway Department.

Whenever a rail wagon that we have booked to a customer or a distributor does not get a move on in a reasonable enough time, whenever a wagon does not put its best wheel forward, so to say, we despatch Javanthinathan to investigate. We don't know what he does, but we



K. Krishnaswami Iyengar.

do know that wagons soon start growing wings! Javanthi knows men who matter and methods that count or to put it another way, he knows mattering men and counting methods!

“*Inspector-General*”: Mr. K. Krishnaswamy Iyengar, Accounts, is affectionately known to friends by this endearing designation. He acquired it in 1942 as a Demonstrator in our Tea Canteen, then run by the Tea Market Expansion Board. In 1944, he was made the Supervisor of the Food Canteen started by MCIC and in 1945 he was transferred at his own request to the Accounts Section.



D. Chidambaram.

A trained teacher who has also received some training in music, Mr. Iyengar was for many years a teacher in various schools, in the Salem District, including a spell at the M. T. C. Elementary School, Mettur.

To Iyengar must be given the credit of reorganising our *Bhajana Samajam* it was he who made the *Samajam* adopt the accepted *paddhati* or procedure.

A keen student of the Veda class, Mr. Iyengar is also a “front-rank personality” at all our religious functions and discourses.



N. G. Narayanan.

“*Operators — SBP*”: Meet some more men of the SBP plant—N. G. Narayanan and D. Chidambaram—Operators. Narayanan has been working in the Bleaching Powder plant right from 1941, the year in which production started in the old plant. It's sort of ‘Stability—thy name is

Narayanan’ with him, if you will pardon a corny pun.

A modest and sincere worker, always alert and mindful of his duties, “Operation—Stable Bleaching Powder” is safe in his capable hands.

Chidambaram is another devoted operator of this plant. He too joined MCIC back in 1941, but before being posted to the bleaching powder section (1945) he had worked in other sections like Stores, Transport and Packing.

Chidambaram has a flair for good house-keeping; he can always keep it impressively clean. Narayanan, and Chidambaram (with N. Sivaraman, V. Sitaraman and R. Pasupathy) operate the SBP plant and produce the famed “Cauvery Brand” Stable Bleaching Powder.



MANUFACTURE OF X-RAY EQUIPMENT

The Government of India have constituted a panel of experts to suggest measures for the development of the manufacture of X-Ray equipment in the country. The panel will assess the requirements for various types of X-Ray equipment and examine existing facilities for their manufacture. At present, only a small portion of the country's requirements of X-Ray equipment is being made in India.

CHEMICAL PORCELAIN

The Central Glass and Ceramic Research Institute, Calcutta, has developed a process for the production of chemical porcelain—which is of a special quality and required in the manufacture of dishes, crucibles, Buchner funnels, etc. The porcelain now developed conforms to the standard British specification, and laboratoryware made from it has been found to compare well both in quality and performance with imported articles.

The Country's requirements are at present met solely by imports.

REMOVAL OF IRON FROM HYDROCHLORIC ACID

It has been found that the removal of ferric iron from hydrochloric acid by iron exchange is both economical and commercially feasible. The process is interesting especially from the standpoint of economy, since only water is used to regenerate the resin.

After many trials in the laboratory, Illico-Way Laboratories, U. S., have discovered a suitable anion exchange treatment. After treatment the acid is said to be water-white and its iron content less than 0.1 part per million. If ferrous iron exists, free chlorine can be used to oxidise the ferrous iron to the ferric state. Any chlorine residuals will be removed by the resin. Sulphates or sulphuric acid are not removed by the chloride form of the anion exchange resin.

AUTOMATION IN LABORATORY

The fully automatic laboratories built by Baird and Tatlock (London) Limited are believed to be the first of their kind in the world. These laboratories are designed to carry out

chemical analyses completely automatically and so relieve the scientist of problems of routine analytical work. On continuous working, one automatic laboratory could, it is claimed, replace three skilled men, each operating an eight hour shift. In certain cases, say, the manufacturers, it may be possible to design an "Analmatic" laboratory which could carry out operations normally requiring a laboratory team.

In an Analmatic laboratory, analysis is done completely automatically — from taking a sample to recording the final result on chart.

KARACHI OIL DISCOVERY

Petroleum deposits have been discovered in the residential suburbs of Karachi town. Pakistan Petroleum Co., a subsidiary of the Burmah Oil Co., will start drilling a test well shortly. The Government of Pakistan is understood to have ordered the suspension of building operations in the area for six months to enable the Company to carry out tests.

UTILISATION OF LOWER GRADE ORES

Presiding at a meeting of the staff of the Electro-Chemical Research Institute, Karaikudi on February 23, Mr. V. Seshasayee paid a tribute to the initiative, enthusiasm and vision of Dr. R. M. Alagappa Chettiar, Prof. Antony P. Kreschkov, Counsellor for Scientific Affairs, Soviet Embassy, New Delhi, was the guest speaker.

Mr. Seshasayee said that the world's natural resources were in a state of continuous depletion. The economic salvation of the country, he continued, would appear to lie in the reclamation and utilisation of lower grade ores. He made an appeal to the research workers of the centre to concentrate on this problem and to evolve new techniques for the separation of the lower grade ores of the country.

Dr. Joga Rao, Assistant Director, proposed a vote of thanks.



ANNUAL DAY TOURNAMENTS
(Contd.)

Badminton Fives: (9 entries) K. Sampath's team beat Krishnasami's Team in the final. (2-0)

Badminton Doubles: (14 entries) Sambandam and Kannan beat Sampath and D. Rajam (2-0) in the final.

Tennis (Junior) Singles: (10 entries) Ratnam became the Junior Champion by winning comfortably the final beating Subba Rao (2-0)

Tennis (Junior) Doubles: (5 entries) Started on the league system, the event was completed on the knock-out system. Partnering Gopalan, Ratnam achieved a double, by beating Javanthinathan and Krishna Rao in the final. (2-0)

Tennikoit Doubles: (14 entries) T. D. Krishnasami and Venkatachalam combined well to defeat Ratnam and Kannan in the final (2-0)

Cricket (Four teams): The first match was played between Kalyanam's team

and Sampath's team, which the former won by 48 runs.

After an early setback, in which Kalyanam and Venkatesan had gone out cheaply, Vijayaraghavan played a great innings for 77, and aided by young Ramdoss (26) and veteran Ramnath, who made a glorious 60, not out, a total of 206 runs was built up. Anthony took 5 wickets for 62 runs.

When Sampath's team went in, three good wickets went west for only 36. Then Sampath and Anthony stopped the rot and carried the score to 71 when Ramdoss struck a great blow for his side by clean-bowling the former for a well-played 25. Anthony, who was playing a lone hand, but who took courage in both hands, started hitting out as there were only tail-batsmen to wag for him; also he was cleverly keeping both the ends up! With D. Ratnam who was instructed in the art of wielding the willow, just before he went in, Anthony put on 40 runs (all by himself) for the 7th wicket. But the task was too much even for him, and when the side was out for 158, Anthony (104 not out) had achieved the proud distinction of becoming the first centurion in the Annual Tourney matches, a fitting honour for a heroic and fighting innings. Ramdoss took three wickets for 49 runs and Kalyanam two for 61.

In the second match played on Dec. 4, 1955, Govindaraghavan's team lost to Srirangan's by five wickets.

The match started off on a sensational note. Anthony (who came as a substitute), the hero of the previous match, was unlucky to play on to his wicket for 1 in the second over of the match, off a good ball from Kumar. Before the other batsman had had time to recover from this rude shock, wickets were falling fast, three of them at 19 and three more of them at 22. The score read 33 for 8. But, again as in the previous match, old-timer Subba Rao started playing a safe game, and finding in P. R. Subramanian a willing and resourceful partner, put on 41 runs for the eighth wicket, but he was soon out at 43. The total of 80 runs looked respectable enough, though not quite safe. Narayana Rao, Kumar and Ganesh did the damage capturing five, three and two wickets for 25, 30 and 23 runs.

Batting next, Srirangan's team passed the total for the loss of six wickets, thanks to some fine batting by Narayana Rao for 26, before retiring hurt and some useful support lent to him by R. Natarajan (Secretary) (14). Anthony and Govindaraghavan bowled unchanged with sustained hostility.

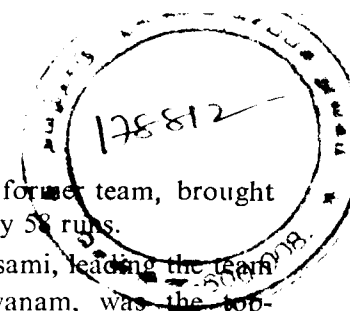
The final played between T. D. Krishnasami's team and Srirangan's teams on New Year Day was a personal triumph for the young medium-pace bowler Raju, who

bowling for the former team, brought a great victory by 58 runs.

T. D. Krishnasami, leading the team in place of Kalyanam, was the top-scorer for his side with 28 runs with Venkateswaran making 20 and Vijayaraghavan 23, and with the usual breezy knock of Javanthinathan (16), the team reached a total of 104.

This was a ticklish, tantalising total—neither too big, nor too small, but players and spectators alike were unprepared for the things that actually came to pass. Raju and Ramdoss bowled a maiden over each. And, then, Raju struck. Mani was his first victim, being caught by the wicket-keeper. From then on, Raju never looked back except perhaps for going for the start of his bowling run! With controlled fury, he was sending stumps and bails flying in all directions and when he clean-bowled Narayana Rao 37, he was mobbed and cheered to a man. In dismissing the whole side for a paltry 46, he had captured 10 wickets (7 of them bowled) for 17 runs in 9.4 overs of which four were maidens. Certainly, it was one of the grandest feats of pace-bowling seen in our cricket history. It was *his* match.

Ramdoss, who bowled at the other end, was a useful foil to Raju. And we, the on-lookers conjured up grand visions of how a Lindwall or a Tyson would be at their destructive best.



REPUBLIC DAY TOURNAMENTS (1956)

(Conducted by Mettur Recreation Club)

Our participation in the above tournaments was marked by several victories. Here is a brief report.

Tennis Singles: T. V. Krishnamurthi of our Club won the title by beating Prager (M. R. C.) 2-0 in the Final. Earlier our S. Ramaswamy lost to the runner-up in the semi-final.

Tennis Doubles: This final was an all-chemical affair. T. V. Krishnamurti won the double crown. Partnering S. Ramaswamy, he beat Sambandam and Ramakrishnan (2-0) in the final. The losers eliminated earlier two strong M. R. C. Teams.

T. V. Krishnamurti got a handsome Rolling Cup for his single victory and the victorious doubles team annexed the usual rolling shield.

Badminton Fives: Sambandam's team avenged last year's defeat by their comfortable 2-0 victory over Sitapati's (M. R. C.) team in the final and were proud recipients of a beautiful newly-donated rolling cup. His team-mates were R. Krishnasamy, Sampath, P. R. Subramanian and Ganesh.

Our second team led by K. K. Dharmarajan lost to the runner-up in the semi-final.

Badminton Doubles: Our discomfiture in this particular event was complete, as both our teams were

eliminated before the final—to the chagrin of their supporters.

Volleyball Trebles: Another depressing story. Our two teams did not survive even the first round!

Table Tennis Singles: Subba Rao of our team was the runner-up in the final. Balu (M. R. C.) beat him 3-2, in a closely-fought match. Sambandam of our team lost to Balu in the semi-final.

Table Tennis Doubles: Subba Rao and Parameswaran won the final against Jayachandran and Selvaraj (3-0) rather easily, but they had to go all out for their victory against the strong Balu-Gopalachari combination (3-2) in the semi-final.

Sambandam and Ramakrishnan (our team) were beaten by the runners-up in the semi-final.

Contract Bridge: Of the four teams we sent, M. Arokiasamy and P. R. Subramanian won the final against a M. R. C. Team. Earlier, our S. Ramaswamy - K. Rajagopal combination lost in the semi-final.

Tennikoit: Kannan of our team lost in the semi-final.

Tug-of-War: Our Team (A. P. S. Mani, Rajaram, O. P. Nagarajan, Vyappan, Varadarajan and Perumal) won the final.

Shot-Put: Rajaram got the second prize.

At a function held on January 26, 1956 in the Mettur Recreation Club premises, Mrs. Prager distributed the prizes to the winners and runners-up in the various events.

THE METTUR CHEMICALS STAFF ASSOCIATION, METTUR DAM R. S.

List of Prize-Winners—Annual Day Tournaments, 1955.

TENNIS SINGLES (Seniors)	{ Winner Runner-up	N. Sundaresan P. B. Srirangan
TENNIS SINGLES (Juniors)	{ Winner Runner-up	K. Rathinam T. S. Subba Rao
TENNIS DOUBLES (Seniors)	{ Winners Runners-up	P. B. Srirangan and R. Natarajan (Secretary) S. Ramakrishnan and S. Ramamurthy (Chemist)
TENNIS DOUBLES (Juniors)	{ Winners Runners-up	K. Rathinam and P. B. Gopalan T. A. Javanthinathan and T. M. Krishna Rao
BADMINTON DOUBLES	{ Winners Runners-up	S. Sambandamurthy and T. Kannan K. Sampath and D. Rajan
BADMINTON FIVES	{ Winners Runners-up	K. Sampath P. Chokkalingam N. Kalyanam S. Panchapakesa Iyer and T. Kannan R. Krishnasamy T. A. Javanthinathan D. Rajan A. R. Narayanan and N. Sundaresan
VOLLEY BALL TREBLES	{ Winners Runners-up	A. P. S. Mani S. Arokiaswami and P. B. Srirangan K. Sampath V. R. Krishnan and K. Gopal (Elec. Sec.)

VOLLEY BALL SIXES	Winners Runners-up	A. P. S. Mani P. Chokkalingam T. S. Subba Rao D. Panchapakesan Sundaram (Teacher) and C. S. Neelamegam R. Govindaraghavan P. R. Subramanian V. Subramanian (Ope) S. Arokiaswamy S. Ramamurthy (A. E.) and K. Gopalaiyengar
TABLE TENNIS SINGLES (Seniors)	Winner Runner-up	T. S. Subba Rao S. Sambandamurthy
TABLE TENNIS SINGLES (Juniors)	Winner Runner-up	M. Padmanabhan R. Natarajan (J. E.)
TABLE TENNIS DOUBLES	Winners Runners-up	T. S. Subba Rao and K. R. Srinivasan S. Ramakrishnan and P. Subramanian
TENNIKOIT DOUBLES	Winners Runners-up	T. D. Krishnaswami and N. Venkitachalam T. Kannan and K. Rathinam
CHESS	Winner Runner-up	(Late) K. Srinivasan (Teacher) T. K. Sitharaman
AUCTION BRIDGE	Winners Runners-up	T. M. Krishna Rao and P. A. Raghupathy Iyer S. Ramaswamy and K. Rajagopal
CONTRACT BRIDGE	Winners Runners-up	K. K. Raman and K. K. Dharmaraja Iyer P. R. Subramanian and M. A. Arokiaswamy

LITERATURE	Winners Runners-up	V. Subramanian R. S. Subramanian and N. S. Parameswaran P. R. Subramanian M. A. Arokiaswamy and D. Rathinam
CRICKET	Winners	T. D. Krishnaswami P. R. Venkateswaran Vijayaraghavan Raju T. K. Ramdoss K. Ramnath T. A. Javanthinathan K. Rathinam P. Chokkalingam A. Krishnamurthy S. Venkataraman and S. Ramamurthy (Records)
	Best batsman for the season	N. Narayanan
	Best bowler for the season (1954—55)	K. Sampath
CONSOLATION PRIZE	...	T. V. Krishnamurthy
	FIELD EVENTS	
SHOT-PUT	I Prize ...	L. V. Rajaram (34' 4½")
	II Prize ...	O. P. Nagarajan
THROWING THE CRICKET BALL	I Prize ..	O. P. Nagarajan (247' 7")
	II Prize ...	V. Subramanian (Lorry)
LONG JUMP	I Prize ...	L. Venkata Doss (17' 6½")
	II Prize ...	S. Arokiaswamy
HOP STEP AND JUMP :	I Prize ...	L. Venkata Doss (33' 6½")
	II Prize ...	{ T. Krishnamachari and A. P. S. Mani
SLOW CYCLE RACE :	I Prize ...	R. Dorairaj
	II Prize ...	L. Venkata Doss

லேடஸ் கிளப் பொருட்காட்சி

சூரியத்தில் மேட்டுநிலை லேடஸ் கிளப் ஆதரவில் கடைபிற்ற கைலேஸ் பொருட்காட்சியைத் திறந்துவைத்துத் தலைமை வகித்த பூமிதி சரோஜா சாமஸ்வாமியை அறிவுறுப்படுத்துகிறோம். பாரதகாட்டுப்பண்ணாட்டுத் தம், அடக்கம், தெய்வாந்தி, அன்பு, பென்ற அரிய குணங்களுக்கும் எடுத்துக்காட்டாக விளங்கும் பூமிதி சரோஜா தலைமை வகித்தது இவ்விறுவளிற் கேட்கு பெருமை அளிக்கும் அம்சமாகியது. மேலும் உற்றாமிடத்தும் அசுசியமான விஷயங்களை யோரத்தினாச் சுருக்கமாகவும் தெரிவிக்கவும் பேசும் ஆற்றல் படைத்த அவர் இவ்விறுவளின்போதும் அவ்விறுவகளை சுருக்கமாகத்தான் ஒரு உரை ஆற்றினார். அவர் பேசியதின் சாராம்சம்:

“மேட்டுநிலை லேடஸ் கிளப் தென்னிந்தியாவுக்கே ஒரு வழிகாட்டிபெயர் வேலை செய்வாகுகிறது என்பதில் சிறிதும் ஐயமில்லை. இதன் அங்கத்தினர்கள் உபயோககரமான பொருதுபொருதகளில் ஈடுபட்டு தாமக்கும், சங்கத்துக்கும் பேசாழிந்து வருவது பெருமைப்பெற்றபடியானதெனது விஷயம். அவர்கள் கைவேலைப்பாட்டினால் தயாரான இவ்வளவு வஸ்துக்களை வைத்து இப்பொருட்காட்சியை ஏற்பாடு செய்து



பூமிதி ஸரோஜா சாமஸ்வாமி

தால் பற்றாபவதத்தும் இத்திறையில் ஈடுபட்ட ஆர்வமும், ஊக்கமும் ஏற்படுகின்றன. இவ்விறுவளிற் பூமிதி சரோஜஸ்வாமி பத்மனாபனும் பூமிதி மாலதி சதவதரவரும் புரிந்துவரும் பேசுவையை தாம் யாவரும் பாராட்டிக் கடைப்பிடித்திருக்கிறோம்.”

பூமிதி சரோஜா சாமஸ்வாமி தையற்கலை, பாரிசியாமி முதலியவற்றில் மிக்க ஆர்வமும் திறமையும் உள்ளவர் என்பது அவர் விட்டை அலங்கரிக்கும் பேசை விடவும், ஜன்னல் திரை முதலியவற்றைக் கண்ணுற்றே வேல்கள் தெரியும். அவர் செய்திந்த சில வம் பிரபாமி வேலைப்பாடுகள் வேலை குறிப்பிட்ட பொருட்காட்சியில் வைக்கப்பட்டிருக்கன.

பூமிதி சரோஜா அவையான விஷயங்களில் தயாரான செலவு செய்தவர். தம்மத்தனை உள்ளவர் என்பது

அதன் அனுகூலமான பொருள் ஒன்றையும் விரும்பமாட்டார், கிண்செலவும் செய்யமாட்டார் என்பது குறிப்பிடத்தக்கதாகும். சில மாதங்களுக்குமுன் நம் மாகாண கவர்னர் பூ. பூமிரகாசா மேட்டுநிலை பேசும் பேசு மேட்டுநிலை பவுன்ஷிப் கமிட்டியின் செலவு வகுமானத்தைவிட அதிகரித்துவருவதின் காரணம் அதன் கிர்வாக கமிட்டியில் ஸ்திரீ அங்கத்தினர் ஒருவரும் இல்லாததுதான் என்று கோபிக்கையாக கூறியதை இங்கு குறிப்பிட்டு நம் குடும்ப ஸ்திரீகள் யாவரும் அனுகூலமான செலவுகளைத் தவிர்த்து குடும்பத்தின் வகுமானத்திற்குட்பட்டு செலவு செய்வதுடன், குடும்பத்தின் கன்மையையும் தேசத்தின் கலையும் கருதி பேசமிப்பும் செய்யவேண்டும் என்பதையும் இங்கு வலியுறுத்த விரும்புகிறோம்.

இன்னொரு செய்தி! பூமிதி சரோஜா சாமஸ்வாமி பொருட்காட்சியில் அதிர்ஷ்டம் சிட்டு ஒன்று கண்கணுவுக்கு வாய்க்கினார். அதிர்ஷ்டவசமாக அவருக்கு இரண்டாவது பரிசு கிடைத்தது! அது ஒரு உல்லஸ் ஸ்வெட்டர். அது மேலும் அதிர்ஷ்டவசமாக அவருடைய கணவர் பூ. S. சாமஸ்வாமி அவர்களுக்கு சரியான அளவாகவும் அமைந்தது!!

ஸ்டேபிள் பிளீச்சிங் பெளடர்

உபயோகப்பவர்களுக்கான
சில முக்கிய குறிப்புகள்

“ஸ்டேபிள் பிளீச்சிங் பெளடர்” என்று சொல்லப்படும் புது பிளீச்சிங் பெளடர் முற்றிலும் நூதனமான முறையில் இந்தியாவிலேயே முதன்முதலாக மேட்டுநிலை கமிக்கல்ஸரால் தயாரிக்கப்படுகிறது.

இதுவரையில் தயாரித்த பிளீச்சிங் பெளடரைவிட ஸ்டேபிள் பிளீச்சிங் பெளடர் கனமானதாகவும், அதிக கார புரன்வதாகவும் (35/37% available chlorine) இருக்கிறது. இதனால் முன் தயாரித்த பெளடரைவிட குறைந்த அளவில் உபயோகிப்பதே போதுமானதாயிருக்கும். ஆனால் இந்த பெளடர் சில பிரத்தியேக துணைக்கையுடைய தால் உபயோகிக்கும் போது சிலவர்க்கியமான விதனை அனுசரிக்கவேண்டும்.

ஸ்டேபிள் பிளீச்சிங் பெளடர் வெகு எளிதிலும் சிக்கித்திலும் தண்ணீரில் கரைத்துவிடுகிறது. அதனால் பெளடரை நீரில் போட்டு திறந்து தோல் சாதாரணமாகக் கரைப்பதே போதுமானது. வேண்டாத பொருள் கனமான கண்ணாடிப் பிடி முதலியன வெகு விரைவில் அடியில் தங்கி தெளிந்த (வெளுக்கும்) கரைசல் கலப்பாகக் கிடைக்கிறது. கப்பலின் அளவு மிகவும் குறைவாகவும், தெளிந்த கரைசலின் அளவு அதிகமாகவும் கிடைக்கும்.

கரைக்கும் போது கவனிக்கவேண்டிய முக்கியமான விஷயங்கள் சில உண்டு. அதிக பேசுமே, அல்லது வெகு வேக

மாகவோ கரைக்கக்கூடாது. அவ்வாறு செய்தால் கப்பி அடியில் தங்குவதற்கு சிறிது தாமதம் ஏற்படக்கூடும். மேலும் சாதாரணமாகப் பெளடரை தண்ணீரில் சேர்ப்பதே சிலாக்கியமானது. பெளடருக்கு தண்ணீர் சேர்த்தால் ஒரு பெளண்டுக்கு சுமார் அரை காலன் தண்ணீருக்குக் குறையாமல் சேர்க்கவேண்டும். தண்ணீர் தகுந்த அளவு இல்லாவிட்டால் பெளடர் கட்டியாகிவிடும். பிறகு அதை உடைத்துக் கரைப்பது கஷ்டம். கிடைக்கும் கரைசலின் அளவும் குறைந்துவிடும்.

கீழே கொடுக்கப்பட்டிருக்கும் முறையைக் கையாண்டால் நல்ல பலன் கிடைக்கும்: ஒரு காலன் தண்ணீருக்கு அரை அல்லது முக்கால் பவுண்டு பிளீச்சிங் பெளடர் என்ற விசுத்திப்படி போட்டு சிறிது நேரம் கலக்கி தெளிய வைக்கவேண்டும். நல்ல காரமுள்ள தெளிந்த கரைசல் கிடைக்கும். இது விரியமுள்ளதாக இருக்குமாதலால் (சுமார் 1½ அல்லது 2 சதவிகிதம் க்ளோரின்) இதை வேண்டுமளவு தண்ணீருடன் கலந்து துணிகளை வெளுக்க உபயோகிக்கலாம்.

ஸ்டேபிள் பிளீச்சிங் பெளடரை உபயோகிப்பதால் கப்பியின் அளவு மிகவும் குறைவாகவும், தெளிந்த கரைசலின் அளவு அதிகமாகவும் இருக்கும். மேலும் அதிக நேரம் காத்திராமல் வெகு விரைவிலேயே தெளிந்துவிடும். இந்தப் பெளடரை உபயோகிப்பது எல்லா விதத்திலும் லாபகரமானது தான் என்பதை உபயோகிப்பவர் எவரும் தாங்களே அனுபவத்தில் உணர்ந்து கொள்ளுவார்கள்.

மேட்கம் செய்திகள்

கடேபிக் பிளீச்சிங் பவுடர் தயாரிப்புச் சாலை திறப்பு விழா: மேட்டூர் கெமிகல்ஸ் தொழிற்சாலையில் நிர்மாணிக்கப்பட்டுள்ள புதிய ஸ்டேபிள் பிளீச்சிங் பவுடர் தயாரிப்புச் சாலையை ஜனவரி 20-ம் தேதியன்று சென்னை தொழில் மந்திரி ஸ்ரீ எம். பக்தவத்சலம் திறந்து வைத்தார். இவ்விழாவுக்கு வந்திருந்த பிரமுகர்களையும் மந்திரி அவர்களையும் டைரக்டர் ஸ்ரீ கே. கே. ராமன் வரவேற்றார். கம்பெனி சேர்மன் ஸ்ரீ எஸ். வைத்தியனாத ஐயர் இந்தத் தயாரிப்புச் சாலை நிர்மாணிக்கப் பட்ட வேண்டியதின் அவசியத்தையும் இதனால் உண்டாகும் நன்மைகளையும் சுருக்கமாக எடுத்துரைத்து, இத்தயாரிப்புச் சாலையை ஆரம்பித்து வைக்கும்படி மந்திரியைக் கேட்டுக்கொண்டார்.

ஸ்ரீமான் கள் ஆர். வெங்கட்ராமன், எம். பி., மேட்டூர் மில்ஸ் மானேஜர் ஜே. ஷார்பிள்ஸ், மதுரை-காரைக்குடி விரியோகஸ்தர் ஸ்ரீ எஸ். எம். ஏ. ஆர். என். அருணாசலம் செட்டியார், ஸ்ரீ கே. எம். சுப்பையா முதலியோர் ஆசிச் செய்திகளை நேரில் தெரிவித்தனர். சென்னை கவர்னர், முதல் மந்திரி, மத்திய தொழில் மந்திரி முதலியவர்களிடமிருந்து வந்திருந்த ஆசிச் செய்திகளை காரியதரிசி ஸ்ரீ ஆர். நடராஜன் வாசித்தார்.

தொழிற்சாலை யை ஆரம்பித்து வைத்து ஸ்ரீ பக்தவத்சலம் பேசுகையில் கெமிகல் தொழில் அபிவிருத்தியில் ஸ்ரீ சேஷசாயியின் ஊக்கத்தைப் பாராட்டினார். தயாராகும் பிளீச்சிங் பவுடர் இந்தியாவின் மொத்தத் தேவையை சமாளிக்கும் என்பதைக் கேட்க தான் சந்தோஷப்படுவதாகவும், பெரிய தொழில்கள் நடத்த உபயோகப்படும் மூலதனத்தைக் கொண்டு பல சிறிய தொழில்கள் கிராமத்தில் நடத்தினால் இன்னும் அதிகம் பேருக்கு வேலை அளிக்கலாம் எனச் சிலர் கூறுவதாகவும், பிளீச்சிங் பவுடர், கைத்தறிநெசவு மற்றும் பல தொழில்களுக்கு உபயோகமாக இருக்கும் என்றும், சர்க்கார் அனைவருக்கும் வேலைகொடுக்க வேண்டும் என்றுதான் விரும்புகிறது என்றும், சோம்பேறிகளுக்கு இங்கு இடமில்லை என்றும், அனைவரும் வேலை செய்தால் நாட்டின் தேவைகள் மறைந்து மக்கள் இன்புறுவர் என்றும் கூறினார்.

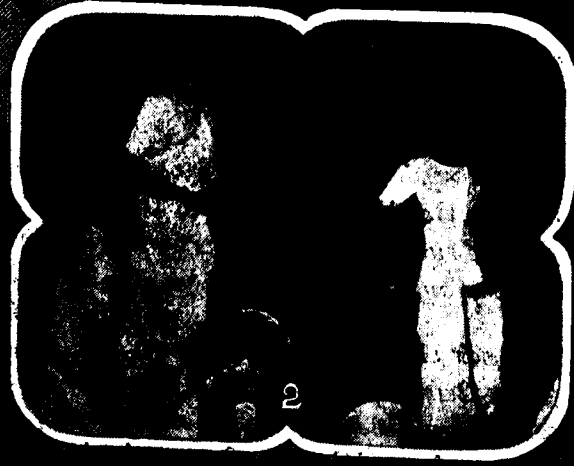
மந்திரி தொடர்ந்து இன்னும் கூறினார்: “இரண்டாம் ஐந்தாண்டுத் திட்டத்தில் பெரிய, சிறிய தொழில்கள் அபிவிருத்தியும், சேலம் பாக்கைட் இரும்பு தாதுக்கள் பற்றிப் பரிசீலிக்கவும் வகை செய்யப்பட்டுள்ளது. இன்னும் சில மாதங்களில் நெய்வேலி பழுப்பு நிலக்கரி பற்றிய முடிவும் தெரிந்துவிடும். இதற்கிடையில் உலோக தாதுக்களை உபயோகிப்பதுபற்றி மத்திய சர்க்காருடன் பேச்சு வார்த்தை நடக்கிறது. இந்த தாதுக்களை பரிசீலிக்க தனியாக ஒரு கமிட்டி ஆரம்பிப்பது பற்றியும்

ராஜ்ய சர்க்கார் யோசித்து வருகின்றனர். நெய்வேலியில் பிங்கான் தொழிலும் சிறு அளவில் சாத்தியமாகும் போலிருக்கிறது. மரம், மூங்கில் இவற்றுடன் தொழில்கள் ஆரம்பிப்பது பற்றியும் சர்க்கார் ஆலோசிக்கின்றனர். அந்தத் தொழில்கள் ஆரம்பிக்கப்பட்டால் தொழிலபிவிருத்திக்கு ஊக்கமும் நம்பிக்கையும் ஏற்படும்”.

மானேஜிங் ஏஜெண்டுகள் டைரக்டர் ஸ்ரீ வி. சேஷசாயி நன்றி கூறினார்.

இவ்விழா கண்காட்சி ஜோடனைகளில் பங்கு எடுத்துக் கொண்டவர்களில் ஸ்ரீ P.D. சகாயம் (திருச்சி), ஸ்ரீ D. ரத்தினம், ஸ்ரீ K. தேவனாதன் இவர்கள் குறிப்பிடப்பட வேண்டியவராவர். ஸ்ரீ R. பார்த்தசாரதி, விளம்பர அதிகாரி, இவ்விழா சம்பந்தமான எல்லா ஏற்பாடுகளையும் செய்தார். இவ்விழாவின் போட்டோக்கள் கருர் ஸ்ரீ D. பெரியசாமியால் எடுக்கப்பட்டன.

உத்தியோகம் தரும் ஆண்டுவிழா:—இவ்விழா ஜனவரி மாதம் 21ம் தேதியன்று மேட்டூர் கெமிகல்ஸ் சேர்மன் ஸ்ரீ S. வைத்தியனாத ஐயரின் தலைமையில் நடைபெற்றது. விழாவின் ஆரம்பத்தில் தலைவர் சங்கத்திற்காகப் புதியதாகக் கட்டிக்கொடுத்த கிளப் விடுதி கட்டிடத்தைத் திறந்துவைத்து கம்பெனி சிப்பந்திகள் தங்கள் தொழிலிலும் விளையாட்டுகள் சமூகநலத் திட்டங்கள் இவற்றிலும் காட்டிவரும் ஊக்கத்தைப் பாராட்டிப் பேசினார். பின்னர் சங்கத்தின் தலைவர் ஸ்ரீ V. சேஷசாயி அவர்கள் கம்பெனி சிப்பந்தி



திலகையின் துயரம்



மேட்டூர் கெமிகல்ஸ் தொழிலாளர் முத்தமிழ் நாடக மன்றத்தார்
இவ்வருஷம் ஜனவரி 22-ம் தேதி "திலகையின் துயரம்"
என்னும் நாடகத்தை சிறப்பாக நடித்தனர்.
நாடகத்தின் சில காட்சிகளை மேலே காணும்
படங்களில் அளித்திருக்கிறோம்.
நாடகத்தை டைரக்ட் செய்தது: T. P. லோகநாதன்.
கனூத, வசனம்: A. சாம்பசிவம்.



கெமிகல்ஸ் காலனியில் இளைஞர் உடற்பயிற்சி நிலையத்தின் ஆரம்பவிழாவின் போது ஒரு நிழ்த்தி. இந்நிலையப் பயிற்சியாளர் ஸ்ரீ J. ஆறுமுகம் பக்கத்தில் நிழ்த்தி.

நாகராஜனாக நடித்த ஸ்ரீ N. கல்யாணம், குமாராக நடித்த K. சம்பத், கமலியாக நடித்த M. கிருஷ்ணமூர்த்தி, நாராயணனாக நடித்த A. R. ராஜ கோபால் இவர்கள் அனாயசமாக நடித்தனர் என்பதையும் குறிப்பிட வேண்டும். வேலைக்காரன் வேணுவாக நடித்த ஸ்ரீ O. S. நடராஜனும், கருப் பாயியாக நடித்த ஸ்ரீ N. சிவராமனும் போற்றத்தக்க முறையில் நடித்தனர். ஸ்ரீ O. S. நடராஜன் டைரக்ஷனி லேயே அதிகசிரத்தைகாட்டி வந்ததால் தம் பாகத்தில் ஓரிரண்டு இடங்களில் பேச்சில் தடங்கல் ஏற்பட்டும் அவர் அதைத் திறமையாக சமாளித்துக் கொண்டார்.

மற்றும் இந்நாடகத்தில் கீழ்க்கண்ட பாத்திரங்களை ஏற்று நடித்த நண்பர்கள் அனைவரும் தத்தம் பாகங்களை சிறந்த முறையில் நடித்தனர்.

வேலன் — ஸ்ரீ D. சேதுராமன்
கந்தன் — „ G. நடராஜன்
அத்தை — „ T.K. கோவிந்தராஜன்
ராழு — „ S. வெங்கட்ராமன்
வக்கீல் — „ S. கோபால் ஐயங்கார்
லைலா — „ S. முத்துகிருஷ்ணன்
மங்களம் — „ K. S. S. மணி

இந் நாடகத்தை O. S. நடராஜன் டைரெக்ட் செய்தார். மேடை நிர்வாகத்தை ஸ்ரீ R. நடராஜன் (சிவில் இஞ்சினியர்) கவனித்துக்கொண்டார். ஸ்ரீ K. தேவனாதன் சிறந்த முறையில் ஸ்திரீவேஷம் பூண்டு ஸ்திரீகளும் பிரமிக்கத்தக்க முறையில் விசேஷமான அங்க அசைவுகளுடன் பரதநாட்டிய மாடினர்.

நாடகத்தில் கதை அம்சம் சாதாரணமானது என்றாலும் விருவிருப்பான சம்பர்ஷணைகளும், ஹாஸ்யமான கட்டங்களும் அதன் வெற்றிக்குக் காரணமாகின.

நாடகத்தின் கதாசிரியர் ஸ்ரீ S. V. செளந்திரராஜன் “ஆனந்த விகடன்” வார பத்திரிகையின் உதவி ஆசிரியராக இருந்தவர். (சமீபத்தில் இளம் வயதி லேயே இவர் காலமானார் என்பதை மிகவும் வருத்தத்துடன் இங்கு குறிப்பிடுகிறோம்.)

திலகவின் தீரத் துயரம்

மேட்டூர் கெமிகல்ஸ் தொழிலாளர் முத்தமிழ் நாடகமன்றத்தார் இவ்வருடம் ஜனவரி 22ம் தேதி “திலகாவின் தீரத் துயரம்” என்னும் நாடகத்தை சிறப்பாக நடித்தனர். இந்நாடகத்தின் கதை-வசனத்தை ஸ்ரீ A. சாம்பசிவம் இயற்றினார். ஸ்ரீ T. P. லோகநாதன் டைரெக்ஷன் பொறுப்பை ஏற்றார்.

கதை: திலகவதி என்னும் இளம் விதவை செல்வராஜ் என்னும் வாலிபனை காதலிக்கிறாள். இவர்கள் வாழ்க்கையில் சிகாமணி என்னும் அயோக்கியன் குறுக்கிடுகிறான். இதனால் காதலர்கள் வெளியூர் செல்ல நேரிடுகிறது. அங்கு செல்வராஜ் ஒரு பஸ் கம்பெனியில் வேலை கிடைக்கிறது. தற்செயலாக அவனுக்கு வந்த சிகாமணி தந்திரமாக செல்வராஜின் நட்புக்குப் பாத்திரமாகி, செல்வராஜை தொழிற் சங்கத் தலைவனாகும்படி ஏற்பாடு செய்கிறாள். பின்னர் ஓர் வேலை நிறுத்தத்தைத் தூண்டிவிட்டு செல்வராஜை ஒழித்துக்கட்ட முயற்சிக்கிறாள். இம்முயற்சி பலிக்காமல் போகவே அவன் ஆத்திரத்துடன் செல்வராஜை விட்டுக்கு வந்து திலகாவை பலாத்காரமாக அடைய முற்படுகிறான். இச்சமயம் செல்வராஜ் வந்துவிடவே, ஒரு சண்டை மூள்கிறது. இதன் இறுதியில் செல்வராஜ் சிகாமணியை சுட்டு விடுகிறான்.

செல்வராஜின் நண்பன் தங்கராஜ் வக்கீல் படிப்பை முடித்து வந்ததும் செல்வராஜைக் காப்பாற்ற அவன் சார்பில் ஆஜராகி வாதாடுகிறான். ஆனால் அவனுடைய சாமர்த்தியத்தால் கொலையாளி செல்வராஜை தப்பிவிட முடியவில்லை. மரண தண்டனை என்கிற தீர்ப்பைக் கேட்டதுமே திலகவதி அதிர்ச்சியடைந்து உயிர் நீக்கிறாள். சோகமான கட்டத்தில் நாடகம் முடிவடைகிறது.

நடிப்பு: இந்நாடகத்தில் செல்வராஜாக நடித்த ஸ்ரீ T. S. முருகேசன், தங்கராஜாக நடித்த ஸ்ரீ S. P. கஸ்தூரி, பணக்காரர் பெரியசாமி பிள்ளையாக



இவ்வாறு திலகாவை பலாத்காரம் செய்து கொல்லும் செல்வராஜைத் தடுப்பது தங்கராஜின் முயற்சி.

நடித்த ஸ்ரீ D. மைக்கேல், கணக்கப் பிள்ளையாக நடித்த ஸ்ரீ G. சாமிநாதன் ஆகியோர் மிகவும் திறமையாக நடித்தனர். முக்கியமாக கணக்கப்பிள்ளையின் வேஷப்பொருத்தமும், நடை, உடை, பாவனை முதலிய யாவும் வெகு ஜோர். கடன் கொடுக்கும்போதே முதல் மாத வட்டியை பிடித்துக்கொண்டு பாக்கியிலும் தனக்கு கமிஷன் எதிர்பார்த்த கட்டம் கரகோஷம் பெற்றது. சிகாமணியாக நடித்த ஸ்ரீ A. சாம்பசிவம் முதல்தர 'வில்ல'னாக நடித்தார்.

திலகவதியாக நடித்த ஸ்ரீ K. சுப்ரமணியம் சாதாரண கட்டங்களிலும் சந்தேகக்கரமான கட்டங்களிலும் நன்கு நடித்தபோதிலும் சோக கட்டங்களில் துக்கம் ததும்பும்படி நடித்தார் என்று சொல்வதற்கில்லை. மஞ்சளாவாக நடித்த ஸ்ரீ N. அர்த்தநாதிக்கு வேஷப் பொருத்தம் நன்றாக இருந்தது. ஆனால் கதையில் இந்தப் பாத்திரத்தின் அவசியம் என்னவென்று தான் புரியவில்லை.

மற்றும் கீழ்க்கண்டவர்கள் இந்நாடகத்தில் பங்கு ஏற்று தத்தம் பாகங்களை நன்கு நடித்தனர்.

ஸ்ரீ S. L. நரசிம்மன்	—மங்களம்
.. K. குப்புசாமி	—மாணிக்கம் பிள்ளை
.. K. A. நடேசன்	—ராமசாமி பிள்ளை
.. D. மாணிக்கம்	—சப் இன்ஸ் பெக்டர்
.. M. S. ராகவன்	—நீதிபதி
.. R. கிருஷ்ணசாமி	—சர்க்கார் தரப்பு வக்கீல்
.. L. ராஜாராம்	—கங்காணி
.. S. C. பழனியப்பன்	—கோவிர்தன், பரமசிவம்
.. C. கிருஷ்ணன்	—பஸ் கம்பெனி முதலாளி
.. R. பாலகிருஷ்ணன்	—பாலு
.. T. V. ஆறுமுகம்	—பஞ்சம்
.. A. மாரிமுத்து	—சஞ்சலம்
.. கிருஷ்ணன்	—பாஞ்சாலம் விஜயா
.. A. சுப்ரமணியம்	—பார்வதி
.. C. A. குமார்	—ஜெயா கந்தப்பன்
.. K. P. காதர்சேன்	—பேப்பர் பையன்

இந்நாடகத்தின் கதாசிரியர் கதை-வசனம் முதலியவற்றைக் கோர்வையாகவும் நாடகபாணியிலும் எழுதியிருப்பது பாராட்டுக்குரியது.

ஒரே ஒரு யோசனை மட்டும் கூற விரும்புகிறோம். வாழ்க்கையில் சுகத்தையும் துக்கத்தையும் மாறி மாறிக்காண்கிறோம். ஆனால் பொழுது போக்குக்காக ஏற்பட்டுள்ள நாடகம் போன்ற நிகழ்ச்சிகளில் அளவுக்கு மீறி சோகக் கட்டங்களைச் சேர்த்தால் நாடகத்தைப் பார்ப்பவர்களுக்கு அலுப்பு ஏற்பட்டுவிடும். ஹாஸ்யமான அல்லது இன்பகரமான முடிவுள்ள நாடகங்கள், சினிமாக்கள் பார்த்துவிட்டு வரும்போது நமக்கு ஒரு திருப்தி ஏற்படுவது சகஜமான அனுபவம். சோகமான முடிவுள்ள நாடகங்களின் மத்தியில் நிறைய இன்பகரமான கட்டங்கள் வந்தால்தான் அதன் முடிவு சோபிக்கும். இவற்றை இக்கதாசிரியர் நினைவில் கொண்டு அடுத்த கதையை எழுதும்போது நாடகம் பார்ப்போரை மகிழ்விக்கும் நோக்கத்துடன் எழுதுவார் என்று எதிர்பார்க்கிறோம்.

இந்நாடகத்தைத் தயாரித்து, காரியங்களை திறமையாக நிர்வகித்ததுபற்றி முத்தமிழ் நாடக மன்றத் தலைவர் ஸ்ரீ A. P. கிருஷ்ணனுக்கு நம் மனமார்ந்த பாராட்டுதல்கள்.

இவ்வுரி உடற்பயிற்சி நிலையம்:

கெமிகல்ஸ் காலனியில் ஜனவரி மாத இறுதியில் ஒரு உடற்பயிற்சி நிலையத்தின் ஆரம்ப விழா கொண்டாடப்பட்டது. இவ்விழா G. வெங்கட்ராமையா தலைமையில் நடந்தது. இந்நிலையத்தின் பயிற்சியாளர் ஸ்ரீ J. ஆறுமுகம் யாவரையும் வரவேற்றார். தலைவர் உரைக்குப்பின் இந்நிலையத்தின் அங்கத்தினர்கள் சில உடற்பயிற்சிகள் செய்து காண்பித்தனர்.

கதா காலேபம்: உத்தியோகஸ்தர் சங்க ஆதரவில் ஸ்ரீ எம்பார் விஜய

ராகவாச்சாரி ஜனவரி மீம் தேதியன்று 'ஸ்ரீ ஆண்டாளைப்' ப்பற்றியும், 7ம் தேதியன்று 'ஸ்ரீ தியாகய்யா' வைப்பற்றியும் அற்புதமான கதாகாலேபங்கள் நிகழ்த்தினார். முக்கியமாக

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ஸ்ரீதியாகய்யா அவர்களின் சாகித்தியங்களை இனிய ஸ்வுரத்தில் கர்நாடகபாணியில் அவர் பாடியது பலரது செவிகளில் இன்னும் ஒலித்துக்கொண்டேயிருக்கும். இன்னும் விஸ்தாரமாக 'ஸ்ரீ தியாகய்யா'வின் வாழ்க்கையையும், கிருதிகளையும் பற்றி அவரிடம் கேட்கவேண்டும் என்கிற ஆவலும் அனேகருக்கு ஏற்பட்டது.

விந்தி பிரேமியம்: ஜனவரி 28 மலை 5 மணிக்கு ஸ்ரீ R. நடராஜன் தலைமையில் மேட்டூர் ஹிந்தி பிரேமியம் வின் ஆண்டு விழா சிறப்பாகக் கொண்டாடப்பட்டது.

ஸ்ரீ R. நடராஜன் தம் தலைமை உரையில், ஹிந்தி ஏன் தேசிய பாஷையாக இருக்கவேண்டும் என்பது பற்றியும், ஹிந்திப் பிரச்சாரம் ஏற்பட்ட போதுதான் தமிழிலேயும் நமக்கு ஓர் ஆர்வம் ஏற்பட்டது என்றும், பிற மொழிகளை கற்றுக்கொள்வதால், தாய் மொழிக்குக் கெடுதல் இல்லாததுடன், தாய்மொழி வளர்ச்சியுறவும் அது உதவும் என்று விளக்கமாகவும் விரிவாகவும் பேசினார். பின்னர் பேசிய ஸ்ரீ P. S. சந்திரசேகரன் தேசத்தின் ஒற்றுமைக்கு தேசிய மொழியை வளர்ப்பது தான் சரியான வழியாகும் என்று கூறினார். அதன் பின்னர் ஸ்ரீ P. பொன்னுசாமி (ஹிந்தி பிரசாரக்) ஸ்ரீ T. S. சுப்பராவ், குமாரி R. கல்யாணி முதலியோர் ஹிந்தி கற்றுக்கொள்வதின் அவசியத்தைப் பற்றி பேசினார்கள்.

பின்னர் புதிய ஆண்டுக்காகக் கிழக்காடவர்கள் நிர்வாகத் தர்களாக

தேர்ந்தெடுக்கப்பட்டனர். ஸ்ரீ R. நடராஜன்—தலைவர்; ஸ்ரீமதி தங்கம்மாள் சுப்ரமணியம்—உப தலைவர்; ஸ்ரீ P. S. சந்திரசேகரன், ஸ்ரீ P. பொன்னுசாமி—காரியதரிசிகள்; ஸ்ரீ M. N. ராமஸ்வாமி—பொக்கிஷதார்; ஸ்ரீ T. S. சுப்பராவ், ஸ்ரீ S. தண்டாயுதபாணி கமிட்டி அங்கத்தினர்கள்.

ஸ்ரீமதி தங்கம்மாள் சுப்ரமணியம் வந்தோபசாரம் கூறிய பின்னர், தேசிய தேத்துடன் விழா இனிது முடிவடைந்தது.

சங்கீதக் கச்சேரி:— பிப்ரவரி 28ம் தேதியன்று கெமிகல்ஸ் பஜனை சமாஜத்தின் ஆதரவில் ஸ்ரீ ஞானானந்த ஸ்வாமிகள் சிஷ்யர் ஸ்ரீ சுவாமிமலை முருகாந்த தீர்த்த ஸ்வாமிகள் அவர்களால் ஒரு சங்கீதக் கச்சேரி தக்க பக்க வாத்தியங்களுடன் நடைபெற்றது.

தியாகய்யா இள விழா:—மார்ச் 10ம் தேதியன்று கெமிகல்ஸ் உத்தியோகஸ்தர் சங்க ஆதரவில் தியாகய்யா தினம் கொண்டாடப்பட்டது. சங்கீத வித்வான் ஸ்ரீ ஸ்ரீனிவாஸ ராவ், ஸ்ரீ S. சுந்தரராமன், ஸ்ரீ O. S. நடராஜன் ஆகியோரும், சங்கீதப்பள்ளி மாணவிகள் மூன்று பிரிவுகளாகவும் தக்க பக்க வாத்தியங்களுடன் தியாகய்யாவின் கிருதிகளை சிறப்பாகப் பாடினார்கள். சங்க காரியதரிசி ஸ்ரீ M. K. ராஜகோபால் யாவருக்கும் வந்தோபசாரம் கூற விழா இனிது முடிவுபெற்றது.

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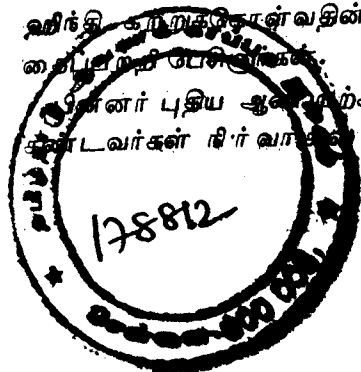
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A high-contrast, black and white photograph of a multi-story industrial building, possibly a factory or warehouse. The building features a prominent corner structure with multiple levels and balconies. A tall chimney is visible on the left side. The foreground shows a dark, possibly paved area with some small structures or equipment. The sky is bright and overexposed.

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