

inception of *Current Science*. He was a familiar figure at the various sessions of the Indian Science Congress Association and was the President of the Agricultural Section in 1924.

By his vast knowledge of things connected with every branch of Agricultural Science, he commanded the esteem and regard of all the Agricultural Officers throughout India. He was always a sound judge of men and was easily approachable and kind to the junior Agricultural Officers. Anyone who went to him for consultation and discussion always returned with additional knowledge to his benefit.

Government was not slow in recognising the value of his work and honours bestowed on him were numerous—Kaiser-i-Hind Medal in 1912, M.B.E. in 1919, C.I.E. in 1930 and Knighthood in 1936.

We offer our condolences to Lady Burt and the family of late Sir Bryce Burt.

MR. V. S. SAMBASIVA IYER,  
B.Sc., L.C.E.

WE regret to report the death, on 10th January 1943, at Madras, of Mr. V. S. Sambasiva Iyer, retired Professor of Geology, Central College, Bangalore. After passing the B.Sc. and L.C.E. examinations of the Bombay University, Mr. Sambasiva Iyer joined the Mysore Geological Department as one of the Probationers and soon rose to the position of Assistant Geologist. He was appointed Professor of Geology in the Central College in the year 1914, which post he held till his retirement in 1920. Even after his retirement from official service he continued to be an active field geologist and took a prominent part in the development of the mineral resources of South India. By his pleasant and amiable disposition and his unostentatious and simple habits, he had endeared himself to all his students, friends and colleagues alike.

## RESEARCH PAYS

RESEARCH pays in hard, cold cash, Eugene Ayres of the Gulf Research and Development Company told the meeting of the American Chemical Society recently. He explained a numerical yardstick which he has developed, which gives an estimate of the differences in costs between industrial processes put into operation without waiting for preliminary experimentation and those that are given the benefit of research in laboratory and pilot plant, together with proper patent procedures, before they are started. If a given industrial problem is carried through all three steps of research, patent procedures and pilot plant experiments, the total cost of "make-ready" is considerably less than half that involved in rushing into full production without the preliminary steps. How necessary the pilot-plant stage is also shown up in the table. With laboratory research and patent procedure, but omitting pilot

plant the costs were substantially greater than those of complete preparation, though still substantially less than those of no preparation at all. Mr. Ayres cited the case of a company that found it necessary to go into the manufacture of a new chemical in a hurry: "There were no large-scale precedents for this operation, but two good process ideas were offered by the Research Department. Because of the emergency, it was decided to commercialise one idea without any research while the second idea was carried in orderly fashion through laboratory and pilot plant. Despite the delay occasioned by months of research, the second idea resulted in a smoothly operating plant before the first and at much lower development cost. The first idea was then sent back to the Research Laboratory and a year later superseded the second."—FRANK THONE.

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