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BY BRUCE MORGAN

OUTSIDE Hobart, few Tasmanians know the CSIRO exists in this State — fewer still know the work that is done here.

Not that the work done by scientists of the Commonwealth Scientific and Industrial Research Organisation is a closely guarded secret.

But behind the bleak, uninviting walls of the organisation's centre in Stowell Ave, Battery Pt, 15 resident scientists work for the future of Australia, receiving little publicity and seeking none.

Work is divided into seven divisions and ranges from radio physics to food research.

Apart from scientists, about 15 technical staff and the usual sprinkling of administrative people play their part in deciding the solutions for today's problems and the future's needs.

Scientists from other States and overseas come occasionally to conduct their own research or work with the resident staff.

The division into which the work is divided are horticulture, involving research into quality, storage, and mineral nutrition in fruit; food research, dealing predominantly with sea fisheries; radio physics; soils; mathematical statistics; computing research; and entomology.

In each of these divisions, CSIRO scientists work full time, solving new problems, improving old ideas — and all working for the future of Australia.

They are men and women of tremendous knowledge and dedication — to themselves, their work, and their country.

But their dedication extends beyond Australia, because they work in co-operation with scientists of similar standing all over the world.

Some feel that full co-operation is the only way to solve many economical problems facing almost every country.

Some of the research has no immediate value but it still represents knowledge that could become a life-blood of th future.

One such scientist is D Grote Reber, the worl pioneer in radio-astronomy

Dr Reber, of the Unite States, comes to work i Hobart about every 11 year and stays for about thre years.

This man, totally dedi cated to his research, ha a unique record of achieve ment since he graduate as an electrical engineer a the Illinois Institute o Technology in 1933.

His greatest achieve ment was in 1937, when h built the world's first radio telescope at Illinois.

Since then, he has re ceived a doctorate of phil osophy in astronomy at th University of Chicago, th Bruce Gold Medal for con tributions to radio-astron omy in San Francisco an the Elliott Gesson Meds for contributions to astron

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omy in Philadelphia, and has given the Russell Lecture on Radio-Astronomy, an honour bestowed by the American Astronomical Society.

In Australia, he was awarded an honorary research fellowship in radio-astronomy by the CSIRO in 1962, for his work here.

Why does he come back to Tasmania every 11 years?

According to Dr Reber, the small farming area of Bothwell provides one of the most unique places to conduct research into radio-astronomy — EVERY 11 YEARS!

Why every 11 years involves a complicated explanation, but he has a radio telescope about five miles north of Bothwell, from where he makes observations and conducts much of his research.

His work ties in closely with the CSIRO in Hobart, and much of his time is spent there during the three or so years he stays at a time.

His research is in the field of radio waves outside the solar system. He finds Tasmania the most suitable place in the Southern Hemisphere for this work.

What does he gain from his research?

"I practically gain nothing," he said.

"It is purely an investigation into something we still know little about."

But although scientific research in many cases has no immediate value, it is knowledge that could, and probably will, be of great value in the future.

Dr Reber's aim is to make a complete survey of the Southern sky at the long wave lengths.

His research, however, is not limited to radio-astronomy.

He is currently working on the design and construction of a practical electric car.

The world economic situation was the main reason why he started in this field.

And in the future, which may not be far away, his work could lead to new developments and a revolution in the transport area.

He claims that the car manufacturers, though, are not really interested in his work.

But because his electric car is designed to perform and last better and longer than today's piston engined cars, that attitude is not surprising.

Car manufacturers can only hope to make huge profits by putting out expensive cars that cost a fortune to run and last only about 10 years he says.

Between working in Tasmania, Dr Reber spent some time studying the historical origins of the Australian aborigine.

He uncovered old camp sites dating back thousands of years, and did much towards filling in the vague history of this primitive race.

He varies his field of work mainly because he cannot work in radio-astronomy all the time.

In fact only the three out of every 11 years are suitable for the research he does.

Dr Reber has been a great asset to the CSIRO, which was acknowledged in 1962.

But more importantly, his work could mean a great deal in the future, and as an asset, he is of value to the whole world.