

RESEARCH CORPORATION

DIVISION OF GRANTS

405 LEXINGTON AVENUE

NEW YORK 17

CHARLES H. SCHAUER
VICE PRESIDENT and SECRETARY

January 9, 1964

Dr. Grote Reber
C.S.I.R.O.
Stowell Avenue
Hobart, Tasmania, Australia

Dear Grote:

I've extended that road paved with good intentions by diligent effort for a month or so. Aside from having little more than generalities and a more relevant date for the season's good wishes, I haven't had much occasion to write and have had a pretty strenuous time of it otherwise.

In addition to my other reasons for being glad to be shut of the year 1963 was the loss of Walt Thwaite via an auto accident on December 10. A most unnecessary and tragic kind of thing which added a very heavy line to the black marks for that now departed year.

Otherwise things seem to be looking up somewhat now. We are getting into the swing of things for the Annual Meeting of our Board which, as you probably recall, is preceded by a dinner for the current Research Corporation Awardee. It's to be a joint Award on this occasion, going to two young mathematicians, each of whom separately has done such an outstanding piece of work that we haven't found anyone thus far able to explain either. While the suggestion has been made that the Awardees be asked to make their brief speeches as explanations of the other's work, we are not sure that either could do so. You'll be getting a few more details with the general information which is shipped to you from time to time. Thought you'd be interested, however, in this situation in that it represents the first Awards we have made for mathematics.

I understand that Jennie is going to be writing as well and will have an assortment of enclosures for you. My only contributions on this score are a copy of the letter requesting remittance of \$36,010 to your account at the

Dr. Grote Reber

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National Bank of Australasia by air mail. The other is a clipping from that, leading scientific journal, Business Week, reporting on interstellar matter.

I am still nursing the hope of getting down there to see you but with a time no more predictable than it has been in the past.

Best wishes,



Charles H. Schauer

CHS:JE

P.S. Enclosed is another notice of dividends paid for the calendar year 1963. This one, from MGM, also does not agree with the figure I sent you yesterday. I hope that an advice slip from the Bank, indicating a deposit of the difference (\$50), was included with those sent to you last January because we don't have it here.

J.E.

MIT team finds evidence of hydrogen combined with oxygen in interstellar space

Hydrogen combined with oxygen—as hydroxyl (OH) radicals—may have been detected and measured in interstellar space for the first time.

The discovery, according to Dr. Charles Townes, provost of Massachusetts Institute of Technology, is one of the most important events for radio astronomy in this decade. From a theoretical standpoint, it gives scientists “an additional key to figuring out what is going on in galactic space.” From a practical standpoint, it will enable radio astronomers to figure out velocities, temperatures, and distribution of oxygen in space.

The first experimental evidence of the presence of hydroxyl radicals in space was offered this week by a team of scientists from the MIT Research Laboratory for Electronics and MIT's Lincoln Laboratory. Using radio astronomy and digital computer techniques, the group ended several years of search by radio astronomers for some evidence of elements—in combination—in interstellar space.

The team reports that the radio frequencies at which the hydroxyl radicals were detected were in close agreement with predictions based on theoretical calculations and laboratory experiments. Their measurements showed the radicals to be present in interstellar space in a ratio of one to every 10-million hydrogen atoms.

Finding the hydroxyl radicals is expected to help astronomers chart the distribution and abundance of OH—and hence, hydrogen and oxygen—throughout the galaxy.

BUSINESS WEEK November 23, 1963

December 10, 1963

The Chase Manhattan Bank,
Grand Central Branch,
422 Lexington Avenue,
NEW YORK,
New York 10017

Attention: Miss Neylan
Foreign Exchange Department

Gentlemen,

Please credit the enclosed check in the amount of \$ 36,010.00 to the account of National Bank of Australasia Ltd. for direct remittance by Air Mail to the account of Grote Reber at the Hobart Tasmania Branch of the National Bank of Australasia Ltd., attention of Mr. D. F. Briggs, Manager, 170-A Macquarie Street.

Very truly yours,

RESEARCH CORPORATION


J. C. Parker
Controller

FL/EWB
Encl.

— b. c. c. C. H. Schauer