

from PR Branch files 8 Oct. /75

NOTES ON DISCUSSION WITH DR. HERZBERG
(In brief).

How have you reacted after winning the Nobel Prize in 1971?

Received a letter shortly afterwards from another Laureate congratulating him, ~~and~~⁺ advising, "You must now learn the art of saying 'no'." H. considers it an honour for ^aCanada as well as himself personally. He feels he cannot say 'no' to engagements when they are in Canada's best interests and will reflect favourably on Canada's image. He feels he owes Canada a debt for the longtime support he's received for his research.

Has the Prize affected the amount of time you now spend on your work?

Originally my time for work was cut by a factor of 2. Now it's not as much although I'm still attracted by many activities I'm asked to get involved with.

Which areas of your work were most instrumental in bringing you the Nobel honour?

Molecular spectroscopy. Especially the discovery of the spectrum of the CH_2 radical. The work with free radicals led to the study of the H_2O^+ ion which has since proven most useful to astronomers in their studies of comets. It's work which was done originally out of scientific interest and curiosity but which later proved to be of great practical use in other areas of science.

I'm sure you would stress the value of the accidental element in basic research and indeed the value of basic research.

Herzberg will, indeed! Especially the folly (in his opinion) of trying to legislate or direct research ~~to~~ exclusively to specific, applied ends.

What role do you foresee for science in the years ahead?

Important and two-fold.

1) as a cultural pursuit much like the arts

2) of course better science is vital to technology in aiding many drawbacks of industrial society.

Science shouldn't get mixed up with politics!

The Herzberg Institute of Astrophysics was created by NRC in early 1975. Are you honored?

Of course he is. A particularly fine gesture on the part of Council and he's pleased that the new Institute will stress the importance of good basic research.

How would you compare science and scientists now to say 40 years ago?

On the subject of astrology- Herzberg is particularly down on it!

If people would learn even a bit about true astronomy, they might see how absurd astrology really is. Herzberg is unhappy that many colleges, educational institutions, etc., spend some time and effort teaching courses in it just because people are interested. Feels that they shouldn't be encouraged to believe questionable theories which may possess many. E.g. daily horoscopes in newspapers.

Other questions :

Were you keenly interested in science when you were a boy?

When did your research career goals really form?

Which is more important to good science and good research, the man or the work itself?

There exist two films about Herzberg and his work.

- 1) a Swedish-made film which he has, made by the Nobel committee.
- 2) a film from the "Nobel Laureates" series currently being shown on CBC Wednesdays at 7:30 p.m.

DISCUSSION WITH DR. HERZBERG

Perhaps the highest honor in the scientific community is the Nobel Prize, awarded each year since the turn of the century by the Royal Academy of Sweden. The first Canadians to receive the award were Drs. Banting and Macleod, whose role in the development of insulin earned the Prize for Medicine in 1923. But it wasn't until 1971 that the award was presented to a Canadian for research in the physical sciences. The man who received it then was Dr. Gerhard Herzberg, a chemist who had ~~earned~~ gained a world-wide reputation as a pioneer in the science of molecular spectroscopy. The foundations laid by his elegant research have enabled other scientists to devise new theories and new techniques to decipher the structures of atoms and molecules.

Comment ①, ②

Much of his early work was done ^{in the period} after 1935, first at the University of Saskatchewan and then at the University of Chicago. ~~For the last 27 years, he has continued his research at the National Research Council in Ottawa.~~ He has spent the last 27 years at the National Research Council in Ottawa. Today, as well as continuing a distinguished research career, he is an outspoken and often controversial advocate of basic science as a tonic for the good health of industrial society.

and on the international stage has become one of Canada's foremost scientific ambassadors.

Comment (4), (5), (11)

In recent years, Dr. Herzberg has based his own research in astrophysics, a study of light and other radiations received in the laboratory from the stars and from interstellar space. Early in 1975, the NRC's new Herzberg Institute of Astrophysics was named in his honor, and established as a focal point for Canadian research in Astrophysics.

Comment (6), (7) Comparison of true astronomy to the pseudo-science of astrology.

Comment (5)