

in presence of other gases. A very little  $N_2$  obscures it; & so does a trace of  $O_2$  or of  $H_2$ . Gases appear to have preferences for conducting. This might form a nice research.

The argon tubes, which are being filled, are 50 in number. They cluster like grapes round a stalk. I am going to keep 12, of which one will be sent to you. Müller will sell the rest for his own profit.

I don't think it will be so long before you can try the gas. One of my old friends, Readman, has worked out a process of preparing  $Ba(CN)_2$  from pure dimer gas or  $BaCO_3$ , & will be working it on a fairly large scale in Westminster in a month or two. The  $N_2$  is completely absorbed, & I fancy

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8th Feb 1895.

My dear Fitzgerald,

I think I have two letters of yours to answer. But before I answer them, let me say that I had a note from Dr Francis's secretary a subeditor, enclosing a letter from Dewar, who says he is going to reply to O's Feb article in the March number. I replied, saying that I thought it very natural for D. to wish to reply; but I advised Dr Francis to submit his MS. to you, as Editor, & as one acquainted with the work.

You must know that Mr St. P. Lurin is scribbling it in, in

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a letter to Nature which will appear next Thursday. You must, I think be guided by that, & of a reply, if a reply from D. be possible. The case is as bad as it can be; and you must see that no ink must flow from D's pen.

The Editor of the Times wrote me yesterday, saying that so many people had complained of the mutilated report they gave of my address, that he would like to know if I had any complaint to make. I said I agreed with what he borrowed from his correspondents had said, & he promised to recant, & to interview his reporter. I imagine that gentleman will get a wigging on the sack.

So much for personal matters.  
Now for other matters.

First: I am getting ready for a set of isothermals, which will really amount to a set of isochors, between  $-90^{\circ}$  &  $280^{\circ}$ : possibly higher. That will show if there is any appreciable amount of Ar. It might be possible to use V. Meyer's apparatus at bright redness & see if any change of density occurs. But that can't be done in a hurry.

Second. O. says that there is no appreciable absorption spectrum in the liquid. But he has not used any great length. It is a colourless liquid. I doubt if Ar would appear in the solar lines. It has a great antipathy to giving a spectrum, being very modest

thing for that any just body.

Fischer of Berlin, as President  
of the German Chem. Soc. sent  
a letter of congratulation from  
the Society today to Rd N. & me.  
So the foreigners have swallowed  
it, & still live.

I am bothered with inter-  
views, & one can't turn them  
out, else they cease in their  
papers. It's your life or your  
life!

May join me in warmest  
regards to all of you.

Ever your sincere

W. Ramsay.

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out CO & argon will pass. The  
gases are easily collected. I  
should have used him before,  
but in his preliminary trials  
he used compressed N<sub>2</sub> made  
from chemical sources, mixed  
with chemically prepared CO.  
In that case, it would not be  
difficult to send you 10 litres  
of argon, which would weigh  
near 20 grams.

Your spect. at ambient pressures  
would be difficult to manipulate.  
Of course it could be done, &  
as a matter of fact, a similar  
apparatus was recently used,  
I forget by whom. It worked  
well. But it must take a  
lot of learning, & I have no  
time just now.

J.

I must leave the magnetic properties to Mr. Rayleigh.

They are out of my line.

I thought of the two spectra as due to momentary combination; one spectrum being produced by compound, & the other by simple molecules. The difference of temperature, & difference of current means that, would possibly favour the view. But isn't this mere speculation? How could it be proved?

I am going to give a week or two to densities. I have now a large stock of very pure gas, & that, & the

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isothermals, appear to me to be the most important thing at present. Of course I shall have another try at compounds. There is a chance of uranium compounds; for a man named Killebrand has found nitrogen in pit chblende to the extent of  $2\frac{1}{2}$  p.c. by weight. But he appears to have made sure by sparking with  $O_2$  & spectrum that it was really nitrogen. However it is a chance; & I have got some mineral which our geologists will work up next week.

Deethlot gave an account at the French Academy last Sunday & wrote me telling me about it. The Academy applauded - an unprecedented