

so it appears that they are non-atomic molecules. & we have now four metals: Cd. Hg. Na. & H. The molecules of which are monatomic. Should the others also prove non-atomic, would the hypothesis hold that all atoms conduct? That molecules, to conduct have first to be split into atoms? See Schuster's work on gases. Has it been proved that Sulphides do not conduct without electrolysis? & what about  $P_4$  &  $As_4$ ? I think an arsenic vacuum tube might show something curious.

These are mere notions, but what do you think of them?

Hindost regards to best of you from both of us. This is Eleka's birth day, & she has seen the Queen!

Ever yours  
W. Ramsay.

12, ARUNDEL GARDENS.

W.

18<sup>th</sup> May, 1888.

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Care Fitzgerald!

Recorru est, me tibi  
autem gratulare, quod ob-  
temperas locum examinatoris,  
quod desideris. Jam magis  
pando, et uxor mea mecum,  
quia occasionem dabit te  
saepe apud eum videre.  
Preco tibi nunquam oblioscere  
hunc domum esse trinum,  
quoniam venias in Londonum.  
Multas gratias autem  
tubes, ob tuas gratulations.  
Sicm idem, quoniam selectio  
annunciata fuit, fuisse apud  
Societatem Chymicam, Crookeso  
praesidente. Tardus adveni,

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ita ut finem fecit negotii.  
 Præsidens ex cathedra,  
 motionem fecit, quam  
 secretario secundatus fecit,  
 gratulaciones societatis nunc  
 Dakerae esse propter selectionem.

How it drags on my pen,  
 or how very curious it is! But  
 I feel that a month's need  
 would make a decent Latin  
 writer of me. Why don't we  
 leave it decently like another  
 language?

That is a capital result of  
 Döbly's.

It too have been about.  
 What think you of this?  
 Raoult's method of determining  
 molecular weights by the lowering

of the freezing-point of a solvent  
 by the substance dissolved appears  
 to be universally applicable. I  
 am making experiments now with  
 an alloy of cadmium & mercury,  
 which is said to have a definite  
 composition, using it as a solvent.  
 I propose to determine the mole-  
 cular weights of a lot of metals,  
 by seeing how much they depress  
 the freezing-point of this alloy.  
 Now there can be no reasonable  
 doubt from Van't Hoff's paper  
 (which I am giving to the physical  
 society on Saturday night)  
 that liquids are simply compressed  
 gases, & that — as a general rule —  
 molecules dissolved in liquids  
 are gaseous molecules, & not  
 complices made up of a lot of  
 gaseous molecules. Scott has  
 recently determined the vapour-  
 density of cobalt & potassium