

50 Papers that have influenced Atmospheric Chemistry

Dear IGAC Community –

In putting together a recent revision to a text book, I was inspired to think about where atmospheric chemistry and physics has got to as a subject and began wondering if one was to ask “*What are the 50 most influential papers that have contained the primary science that has shaped Atmospheric Chemistry?*” What would the answer be? Clearly, this would depend on your perspective but I feel it might be an interesting question to explore with the community.

With this in mind, I would like to undertake an expert solicitation across the community to explore this topic with the view to producing a high impact paper.

Clearly, there must be a methodology that underlies this, one could look at citations and downloads and the like. This would not do justice to very early papers, for example, nor very recent papers. Therefore, I decided on an expert solicitation coupled to some information around citations as a hybrid methodology.

As to the scope, it is the studies that have shaped our understanding of the atmosphere and the underlying chemical and physical processes with a focus on the troposphere, encompassing modelling, field measurements, remote sensing and laboratory studies as well as the atmosphere and its interactions with the biosphere, cryosphere and hydrosphere.

The choice of paper may not necessarily be the first paper in an area but the one that has brought it to the front of attention. I realise this scope is large, but I am interested to challenge ourselves around what are the 50 influential papers that really, in terms of primary science, define our understanding of that.

I therefore wish to invite you to send in to me to the following email address: psm7@le.ac.uk, your 10 nominations for the papers that have influenced you the most or you think define our subject. If you have the chance to write a few lines on why, that is not essential but welcome. I am interested to encompass all the areas of our discipline so please feel free to view this as a broad scope and pass this invite to any of your interested colleagues. I would like to complete the collection of nominations by 10th January 2019.

Once I have this data I will pull together a small committee to discuss and order these in terms of a publication. I do hope you feel that you can contribute as this is an exciting way of looking at where we have come from and potentially where we need to go to.

Ys -Paul (former IGAC co-chair)

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