

Case Study: WMG's materials themed journal club

On: Research staff enterprise & entrepreneurship development & opportunities

Purpose: To highlight the value and purpose of the WMG journal club and how it differs from others

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Report Written by: Nikki-Ann Wensley

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This case study aims to explain the drivers to setting up a journal club in WMG's materials themed group, discusses the decision process for choosing which journal papers should be reviewed and reveals the impact of this on the research conducted within this group. This case study also aims to compare the WMG journal club with the systems biology journal club and provide a list of instructive considerations for others who wish to set up a journal club.

Through working within a multifaceted group with diverse skill sets and research specialisms it is often difficult to collaborate outside the material sectors (namely metals, plastics and composites) and modelling sectors that the group is separated into. Sumit Hazra seized an opportunity to set up a journal club that could be used to bring together researchers (voluntarily) from these different disciplines to discuss journal papers which reveal the 'state of the art' and establish what is required to 'stay ahead of the game.'

The benefit of a journal club in this type of group is that it brings together both post doctorate researchers and research associates and their wide range of skills to engage in discussions over other people's work beyond the materials themed group (i.e. not the attendee's work); this provides a suitable environment for the attendee's to relay their skills in discussion without the pressures of formal presentations. This environment presents an opportunity to: -

- identify the research gaps
- establish better or alternative ways of addressing the research gap
- explore how future projects and experiments could be conducted and funded.

Prior to each meeting Sumit Hazra requested one journal paper to be suggested by a post doctorate researcher which is cutting edge and deep/focussed and one to be suggested by a research associate which is broad and generally less technical; this enabled the group to gain a different perspective on the materials research.

So far this journal club has led to: -

- interaction between members of the group
- further discussion of research beyond the journal club meetings
- one type of experiment conducted in a new and innovative way
- identification of other experiments that could be conducted by through internships.

On comparing the WMG’s journal club with the systems biology journal club it was evident that distinct differences exist between these clubs as demonstrated in Table 1. It was determined that the purpose of the journal club dictates it’s set up and, as such, the following list of considerations was created for those embarking on setting up their own journal clubs:

1. Drivers to implementing the journal club
2. The size of the journal club and research focus
3. The regularity and intensity of the paper reviews
4. Desired impact of the journal club meetings.

	WMG journal club	Systems biology journal club
Drivers to implementing a journal club	To identify research gaps, spark internal collaboration and establish new or alternative ways of overcoming research problems, research equipment designs or measurement techniques and thus stay ahead of the research	To track other peoples work and stay ahead of the research
Number of attendees and research focus	Approximately 10 people and growing who work in a variety of research areas within materials	Small group or people who work within the same area
Regularity and intensity of paper reviews	2 papers reviewed monthly – broad review	1 paper reviewed weekly – thorough review
Impact of the journal club meetings	Learning process - establishing the broad range of skills and occasionally future research projects	Many projects