

Reflections on This Year's Advanced Lithography + Patterning Symposium

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After a two-year hiatus and a further two-month delay, the SPIE Advanced Lithography + Patterning (AL+P) Symposium was held in-person at the end of April 2022 in Silicon Valley. This provided an opportunity to appreciate and reflect on the relationship between this symposium, which is the largest regularly held event focused on patterning for micro- and nano-technologies, and this journal. Much material published in *JM³* is first introduced at AL+P, so this is an important event for this journal, even though not all material presented in the conference is published in *JM³*.

Authors who publish in *JM³* cover the same subjects as those who present at AL+P, but there are some essential differences between papers published in peer-reviewed journals such as *JM³* and proceedings papers. Papers accepted for publication in *JM³* meet standards of rigor and completeness that are higher than are enforced for proceedings papers. For papers published in a peer-reviewed journal, there are expectations of completeness to the work described, along with disclosure of many details. [Guidelines](#) for what material needs to be included in papers in *JM³* were outlined in editorials published in this journal in 2020 and 2021. During the peer-review process, subject-matter experts are able to provide constructive feedback that usually results in improved papers, while proceedings papers rarely benefit from such reviews.

The value of face-to-face meetings was better appreciated as a consequence of the two-year moratorium for AL+P. It is often interesting and valuable to hear about work-in-progress, and presentations of progress reports are appropriate and welcome at conferences, even if not suitable for a peer-reviewed journal. By seeing works-in-progress, one can get a sense of the areas of research in which there is substantial activity. This provides guidance for creating special sections in *JM³*. At conferences, besides the practicality of seeing the latest results, although perhaps incomplete, some of the presented material is simply fun to see.

While we may become acquainted with people through their published papers, and we may even see their faces and hear their voices during videoconference presentations, face-to-face meetings provide opportunities for the types of exchange that are really needed to get to know people well. At AL+P, when held in-person, one can truly appreciate that there is a community of patterning technologists. In addition to catching up with colleagues with whom we have long been acquainted, an important element of face-to-face meetings is the opportunity to meet new members of the patterning community. Many of these new people are students, who can begin to establish important connections by meeting established experts in patterning technology. Students can also become more easily known to hiring managers at face-to-face meetings. Students are usually required to submit their research to peer-reviewed journals, so we often know of their work from their papers published in *JM³*, but there are many other considerations for hiring in addition to the quality of the technical content in published papers. Personal interactions are important for both those seeking jobs as well as those trying to fill open positions.

Unfortunately, AL+P this year was an incomplete gathering of our patterning community. Travel restrictions still limited participation by our colleagues, particularly from Asia. Moreover, due to remaining, difficult circumstances imposed by COVID, AL+P overlapped this year with Photomask Japan. Hopefully, future conferences can be held during their normal timeframes, helping to avoid such conflicts. I am looking forward to renewed opportunities to meet old colleagues again and make new acquaintances at these future meetings (and encourage authors of high-quality work to submit papers to *JM³*!).