The authors propose and demonstrate an approach for generating triangular waveforms using a single drive MZM biased at the transmission null, proper polarization control of the input CW signal to the modulator, an optical filter, and a polarizer. The approach is explained theoretically and verified by experiment. Time-domain waveforms and RF spectra are recorded and triangular waveforms at 8, 10, and 12 GHz are demonstrated.

I do not find anything fundamentally wrong with the submission and the results show clearly what has been obtained. However, there are many approaches for photonic generation of microwave triangular waveforms, some of which have not been referenced:


I would like the authors to clearly explain the advantages of their proposed approach compared to previous demonstrations as the short descriptions presented in the introduction are insufficient or not well justified. Alternatively, what are specific problems (apart from 'complexity') associated with these approaches that the authors' approach solves? For example, while a dual-parallel MZM may be costlier compared to a single drive MZM, the approach in the Opt Lett reference above does not require any optical filters nor a polarizer. As such, some 'complexity' in the electronic drive is traded-off against added photonic components ('complexity' in the optical domain). Moreover, what are the specific requirements for triangular waveform generation and how does the proposed approach meet these requirements.

While the authors present a new way to generate triangular waveforms, this alone is not enough; they must show that this approach has clear advantages compared to others, or that it offers superior performance.

The authors have not really addressed my comment with regards to demonstrating/highlighting the advantages of their proposed approach compared to previous demonstrations. Simply including the references mentioned in my previous review and a brief comment about cost is insufficient. The proposed approach requires careful adjustment of the bias voltage, an appropriate modulator with the polarization
sensitivity, a filter, and a polarizer. These will complicate the setup and of course, add cost. The use of a polarizer also precludes possibly integration of the entire system. The authors need to provide concrete examples/evidence of advantages of their proposed approach (or what problems associated with existing approaches it addresses).

The paper reports an alternate way for triangular pulse generation. This alone is insufficient for publication unless the alternate technique provides real advantages over the current state-of-the-art. The authors have failed to demonstrate this, or at least to convince me of this. Unless the authors do so, I do not recommend the paper to be published.

However, if the editors feel that this is not an important issue, then I also respect their decision if they choose to accept the paper.

**Stage:** Second revision  
**Recommendation:** Decline to publish

My concern with the paper is that the approach requires a modulator with a specific polarization sensitivity. Once this is known, the operating conditions can be set to manage the spectral harmonics and hence obtain the necessary waveform. The authors still failed to mention what advantages this approach has over other approaches which are simpler and easier to implement for generating triangular waveforms.

The fact that the approach is novel is a necessary, but not sufficient condition to warrant publication. If the novel approach fails to deliver any improvements over existing ones, then I unfortunately do not see a point in publishing it.

After 2 rounds of revision, the authors simply cannot justify their approach over others. As such, I cannot recommend the paper for publication.

As per my comment above, a novel approach to doing something that does not bring any advantages or solve any issues over existing approaches should not be published. However, I do appreciate the notion of performing research and as per my comments of the previous version, if the editors still feel the paper is suitable for publication, I will not object to this.