

Abstract Submitted  
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**Model for periodic pattern formation in salt precipitates during drop evaporation.** VLADIMIR A BELYI, M MUTHUKUMAR, University of Massachusetts — Recent works on evaporating liquid drops have led to qualitative understanding of the deposit growth and, in particular, formation of tall rim near the drop contact line. However, emergence of more complex patterns in the evaporation deposit still remains unexplained. In the present work we analyze formation of periodic salt deposits in the evaporating water-polyelectrolyte-salt systems. We propose a model that explains formation of concentric rings in the salt deposits, as well as transition between radial and tangential directions in the salt deposit growth.

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