## MAR13-2013-020942

Abstract for an Invited Paper for the MAR13 Meeting of the American Physical Society

## New Developments in Brominated and Halogen-Free Flame Retardants<sup>1</sup>

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With a broad portfolio of brominated, organophosphorus and inorganic flame retardants, ICL Industrial Products (ICL-IP) is engaged in the development of new flame retardants by exploiting the synergism between bromine based, phosphorus based and other halogen-free flame retardants. ICL-IP is also focusing on the development of polymeric and reactive flame retardants. This presentation will give examples of existing and new polymeric and reactive products for applications in thermoplastics, thermosets and polyurethane foam. This presentation will also show examples of phosphorus-bromine synergism allowing partial or complete elimination of antimony trioxide in many thermoplastics for electronic applications. New synergistic combinations of magnesium hydroxide with phosphorus and other halogen-free FRs will be presented.

<sup>1</sup>Work done in collaboration with S. Levchik, ICL-IP America, 430 Saw Mill Rriver Rd., Ardsley, NY, 10502, USA and M. Leifer, ICL-IP, P. O. Box 180, Beer Sheva 84101, Israel.