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## BOOK OF ABSTRACTS

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Divisione di Spettrometria di Massa  
della Società Chimica Italiana

**Po-01**  
**STUDIES ON ALKALY METAL HALIDES AGGREGATES IN GAS**  
**PHASE**

David Bongiorno<sup>1,2</sup>, Leopoldo Ceraulo<sup>1,2</sup>, Serena Indelicato<sup>1,2</sup>, Sergio Indelicato<sup>3</sup>

<sup>1</sup>Dipartimento di Scienze e Tecnologie Molecolari e Biomolecolari (STEMBIO), Università degli Studi di Palermo, Via Archirafi 32, I-90123, Palermo, (Italy) I, <sup>2</sup>Centro Grandi Apparecchiature - UniNetLab, Università degli Studi di Palermo, via F. Marini 14, I-90128 Palermo, ITALY, <sup>3</sup>CQRC Laboratory, A.O.U.P. "P. Giaccone", Via Del Vespro, 129, I-90127, Palermo, (Italy)  
E-mail: serena.indelicato@unipa.it

Salts formed by alkaline metals and halides are characterized by strong ionic bonds that are easily broken in high dielectric constant solvents as water. In these solvents these electrolytes are completely dissociated and do not tend to aggregate, unless a strong solvent removal has been promoted. Owing to our previous studies based on alkylsulfonates aggregation in the gas phase, the eventual aggregation of even simpler species as metals alkali halides has been evaluated. In this study several alkaline halides (sodium potassium and cesium Chloride, bromides and iodides) have been analysed through ESI ionization/mass spectrometry. Indeed, singly and multiply charged aggregates formed by ESI, have been observed. The positively charged species have been analyzed in order to determine their stability through HRMS experiments also on the light of the crystal structure expected. In addition the eventual applicability of rate theories (Q.E.T., R.R.K.M.) to C.I.D. behavior of these ionic species has been evaluated.