

## Supporting Information

S1

### Preparation and properties of AlN (Aluminum Nitride) powder /thin films by Single source Precursors.

Himanshi Chaurasia, Santosh K. Tripathi<sup>a\*</sup>, Kamlesh Bilgaiyan<sup>b</sup>, Akhilesh Pandey<sup>c</sup>, K. Mukhopadhyay<sup>a</sup>, Kavita Agrawal<sup>a</sup> and N. Eswara Prasad<sup>a</sup>

<sup>a</sup>Defence Materials Stores and Research & Development Establishment (DMSRDE) P. O. G. T. Road, Kanpur-208013, India

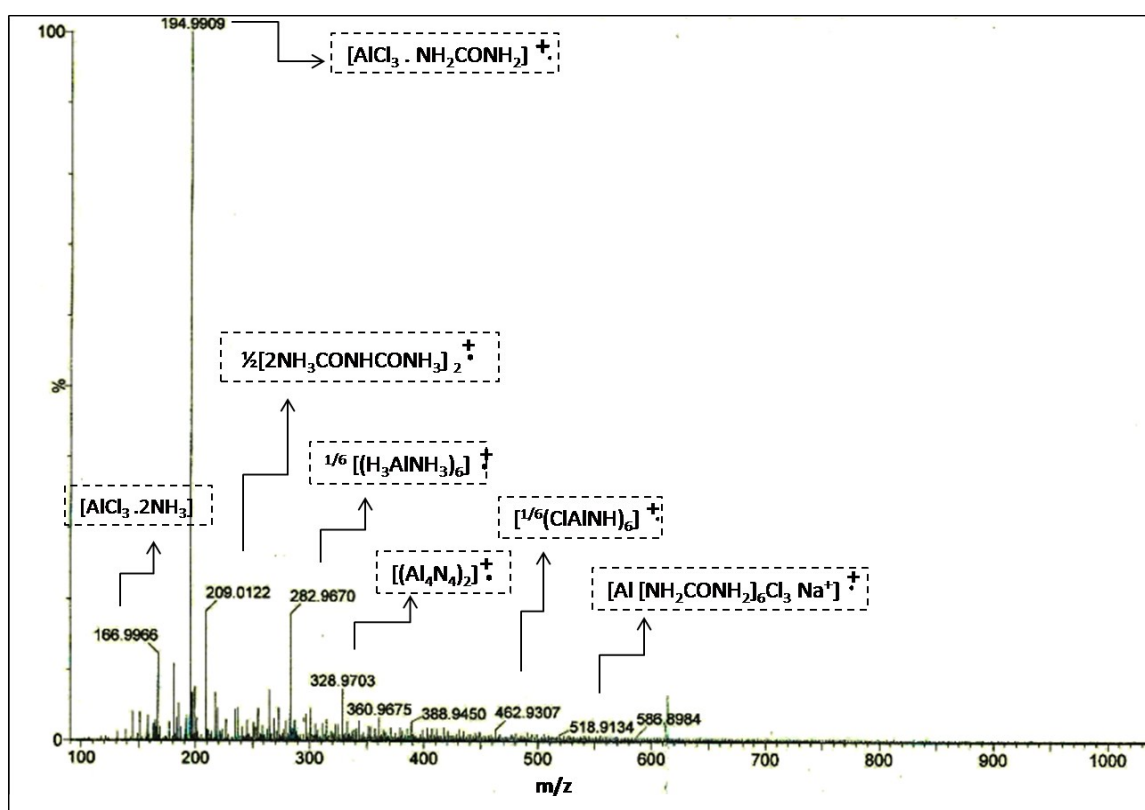
<sup>b</sup>Department of Chemistry, Bundelkhand University, Jhansi

<sup>c</sup>Solid State Physics Laboratory, DRDO, Lucknow Road, Timarpur, Delhi 110054, India

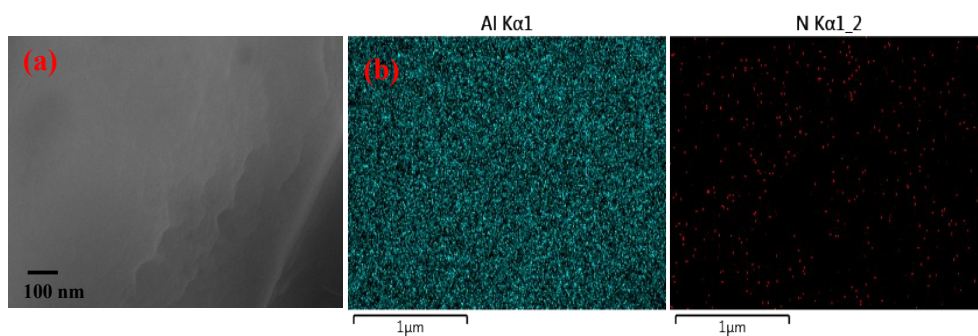
<sup>d</sup>Corresponding author at: Defence Materials Stores and Research & Development Establishment (DMSRDE) P. O. G. T. Road, Kanpur-208013, India

<sup>e</sup>Email: sktripathi23@gmail.com

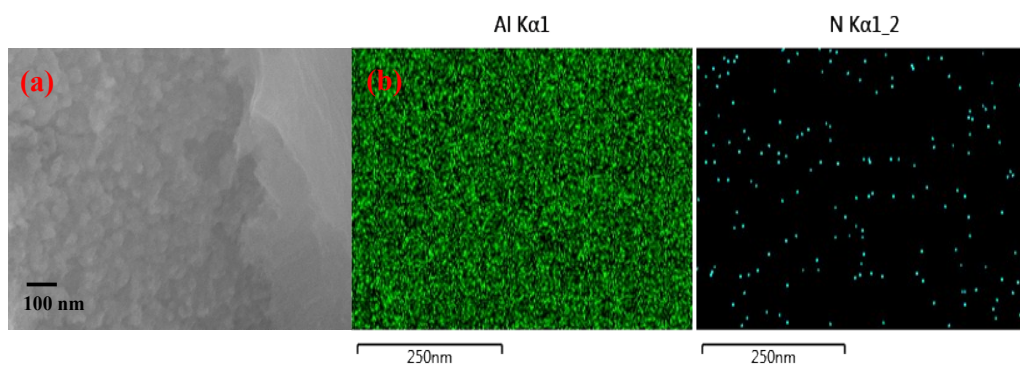
#### 1. Mass spectra of Hexa Urea Aluminate (III) Chloride complex (2P) :



2. FESEM and EDAX micrographs of thin films pyrolysed at 1000°C and 5, 10 Torr respectively :



(a).SEM image and (b). Electron mapping of film pyrolysed at 1000°C, 5



(a).SEM image and (b). Electron mapping of film pyrolysed at 1000°C, 10