

## Contents

<b>1. Introduction</b> .....	1
<b>2. Discrete Element Method (DEM)</b> .....	1
2.1 Literature Survey .....	2
2.2 General Theory for Two-dimensional Disc Shaped DEM .....	3
2.3 The Two-Dimensional Superquadric DEM .....	9
2.4 The Three-Dimensional Ellipsoid DEM .....	11
<b>3. DEM Analyses on Force Support Systems of Particulate Media</b> .....	14
3.1 Introduction .....	14
3.2 Uniaxial Compression Test Simulations using Two-dimensional Superquadric DEM.....	14
3.3 Uniaxial Compression Test Simulations using Three-dimensional Ellipsoidal DEM.....	20
<b>4. Concluding Remarks</b> .....	23
<b>Acknowledgements</b> .....	24
<b>References</b> .....	24