



Contribution ID: 256
compétition)

Type: **Poster (Student, In Competition) / Affiche (Étudiant(e), inscrit à la**

Synthesis, Characterization and Applications of Barium Titanate Nanomaterial in Light Emitting Devices

Wednesday 18 June 2014 19:06 (2 minutes)

BaTiO₃ nanoparticles of a controlled size and structure are synthesised for an electroluminescent device application developed by a collaborator. This device requires BaTiO₃ nanoparticles, a narrow size distribution and improved dielectric constant. An experimental study of the material's dielectric constant reports an increase when the particle size approaches 70 nm [1]. This property will be characterized and approached theoretically. Modelling will be performed to understand this phenomenon and verifying its reproducibility.

[1] Wada S., Yasuno H. and Hoshina T., J. Appl. Phys. Vol. 42 (2003) pp.6188

Author: DUMONT, Antoine (York University)

Presenter: DUMONT, Antoine (York University)

Session Classification: DCMMP Poster Session, with beer (4) / Session d'affiches DPMCM, avec bière (4)

Track Classification: Condensed Matter and Materials Physics / Physique de la matière condensée et matériaux (DCMMP-DPMCM)