MOCVD of Coated Conductors in Braunschweig

O. Stadel¹, R. Muydinov²

¹ PerCoTech AG, Bienroder Weg 53, 38108 Braunschweig, Germany, o.stadel@percotech.com

² Technical University Braunschweig, Institut für Oberflächentechnik (IOT), Pockelstraße 14, 38106 Braunschweig, Germany

Abstract - A MOCVD approach to process superconducting Coated Conductors is described and recent results obtained at PerCoTech and IOT (TU-Braunschweig) are presented. Advantages of an all-chemical approach in general and MOCVD in particular are explained. The feasibility of Coated Conductor production, inclusive buffer layer, in a one-path MOCVD system, and the technical and economic aspects of scaling up are discussed.

Submitted July 2, 2009; accepted July 25, 2009. Reference No. RN11; Category 5

Keywords – superconducting, coated conductor, metallic substrate, buffer layer, LZO, YBCO, MOCVD, CSD