

LIST OF PUBLICATIONS

This thesis summarizes the following publications:

1. Effect of pyroxenite flux on the quality and microstructure of hematite pellets

Srinivas Dwarapudi, Tamal K. Ghosh, Amitabh Shankar, Vilas Tathavadkar, D. Bhattacharjee, R. Venugopal
International Journal of Mineral Processing, 96 (2010) 45–53

2. Development of superior quality iron ore pellets for blast furnace using pyroxenite flux

Srinivas Dwarapudi, Tamal K. Ghosh, Amitabh Shankar, Vilas Tathavadkar, D. Bhattacharjee, R. Venugopal
Tata Search 2011, vol.1, p 35-41

3. Effect of pellet basicity and MgO content on the quality and microstructure of hematite pellets

Srinivas Dwarapudi, Tamal K. Ghosh, Amitabh Shankar, Vilas Tathavadkar, D. Bhattacharjee, R. Venugopal
International Journal of Mineral Processing, 99 (2011) 43–53

4. Use of magnesium silicate as flux to develop superior quality CaO-free iron ore pellets for blast furnace

Srinivas Dwarapudi, Tamal K Ghosh, T K Sandeep Kumar, Vilas Tathavadkar, D Bhattacharjee and R Venugopal
Steel Tech, Vol.6, No.1 Oct 2011, p27-36

5. Effect of MgO in the form of magnesite on the quality and microstructure of hematite pellets

Srinivas Dwarapudi, Tamal K Ghosh, Vilas Tathavadkar, Mark B Denys, D Bhattacharjee and R Venugopal

International Journal of Mineral Processing, 112-113 (2012) 55–62

6. Characterization, grinding and pelletizing studies of Noamundi iron ore fines

Srinivas Dwarapudi, Tamal Kanti Ghosh, Amitabh Shankar, Vilas Tathavadkar, D Bhattacharjee and R Venugopal

MPT-2009, RRL Bhubaneswar, Oct 28-30 2009

7. Effect of pellet basicity and MgO on the quality and microstructure of hematite Pellets

Srinivas Dwarapudi, V Tathavadkar, D Bhattacharjee and V Rayasam

6th European coke and iron making congress, Dusseldorf, Germany,

27th June- 1st July 2011, Pelletizing session-8, No.1.

8. Quality and microstructure of hematite pellets with magnesite as fluxing agent

Srinivas Dwarapudi, TK Sandeep Kumar, Vilas Tathavadkar, Mark B Denys, D Bhattacharjee and R Venugopal

Asia Steel conference, Sep. 24-26, 2012, Beijing, China

Conference proceedings,w133-26

Patent filed from the results of this work:

Method for improving the quality of iron ore pellets by adding magnesium silicate.

Application number & date: 695/KOL/2010 dated 28.06.10.

Description of co-authors contributions:

Prof. R Venugopal, Professor, FME Dept., Indian School of Mines, Dhanbad, India and Dr. D. Bhattacharjee, Director RD&T Tata Steel Ijmuiden, The Netherlands have contributed as supervisors.

Dr. Tamal K Ghosh, Principal Researcher, R&D, Tata Steel, Jamshedpur, carried out characterization through QEMSCAN microscope.

Dr. Amitabh Shankar, Researcher, R&D, Tata Steel, Jamshedpur, carried out softening-melting experiments.

Mr. TK Sandeep Kumar Researcher, R&D, Tata Steel, Jamshedpur, carried out TGA and XRD for the samples and pellet firing experiments.

Dr. Vilas Tathavadkar, Head, R&D and Mr. Mark B Denys, Chief, R&D and SS, Tata Steel, Jamshedpur, facilitated laboratory infrastructure and testing knowledge.