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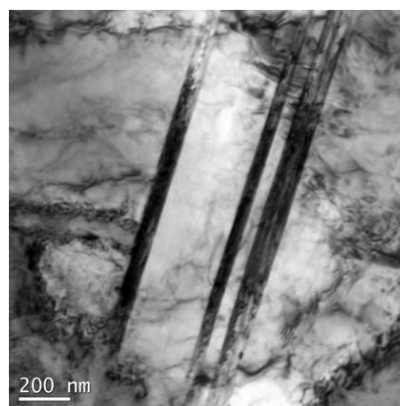
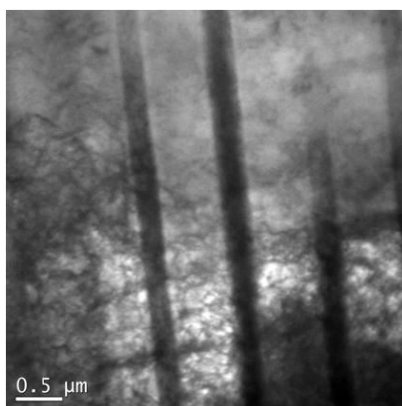
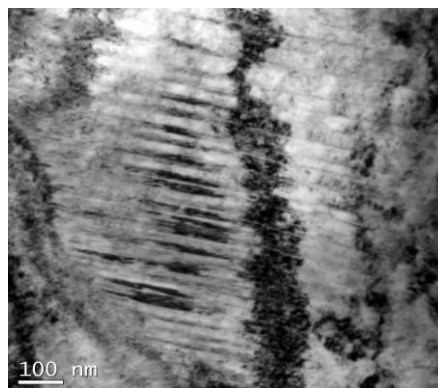
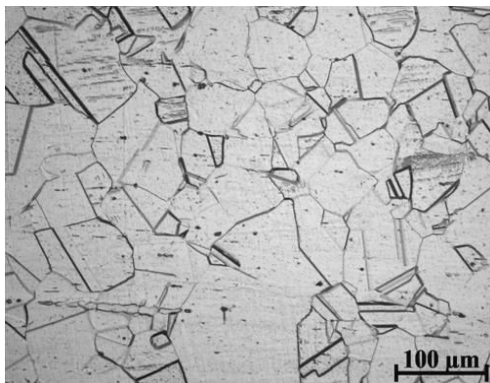
**Registration No- PhD/R/2014/0060**



**Highlights of his / her research (not more than 100 words):**

Twinning induced plasticity (TWIP) steel is a representative of the 2<sup>nd</sup> generation advanced high strength steel which exhibits high strength and excellent ductility. Low carbon and high manganese TWIP steel along with addition of aluminum posses lowering in weight with higher strain hardening due to formation of twins during deformation, while the twins and austenite structure are the main contributors for ductility. The cold rolling has been introduced to obtain high strength without much loss in ductility. Hardness, yield strength and tensile strength of the specimens increase whereas percentage elongation decreases as the amount of cold rolling reduction increases.

**Representative best pictures/ plot/graph with proper heading : 2 - 4 nos**



**Publications:**

1. NK Tewary, A Kundu, R Nandi, JK Saha, SK Ghosh, Microstructural characterisation and corrosion performance of old railway girder bridge steel and modern weathering structural steel, *Corrosion Science* (2016) 113, 57-63.
2. NK Tewary, SK Ghosh, S Chatterjee, Effect of Al Content in Low Carbon High Manganese TWIP Steel, *Key Engineering Materials* (2016) 706, 16-22.
3. SK Nandi, NK Tewary, JK Saha, SK Ghosh, Microstructure, mechanical properties and corrosion performance of a few TMT rebars, *Corrosion Engineering, Science and Technology* (2016) 51(7) 476-488.
4. S Mandal, NK Tewary, SK Ghosh, D Chakrabarti, S Chatterjee, Thermo-mechanically controlled processed ultrahigh strength steel: Microstructure, texture and mechanical properties, *Materials Science and Engineering: A* (2016) 663, 126-140
5. NK Tewary, SK Ghosh, S Chatterjee, Effect of Annealing on Microstructure and Mechanical Behaviour of Cold Rolled Low C, High Mn TWIP Steel, *International Journal of Metallurgical Engineering* (2015) 4 (1), 12-23.
6. NK Tewary, SK Ghosh, S Bera, D Chakrabarti, S Chatterjee, Influence of cold rolling on microstructure, texture and mechanical properties of low carbon high Mn TWIP steel, *Materials Science and Engineering: A* (2014) 615, 405-415
7. NK Tewary, B Syed, SK Ghosh, S Kundu, SM Shariff, G Padmanabham, Microstructural evolution and mechanical behaviour of surface hardened low carbon hot rolled steel *Materials Science and Engineering: A* (2014) 606, 58-67.