

## **PATENTS**

1. A wear resistant part having metal matrix composite (MMC) and process for preparing the metal matrix composite (Ref. No./ Application No. 2847/DEL/2013, Dated 26-09-2013)

Development of metal matrix composite (MMC) by two stages hybridization of fused deposition modelling (FDM) and investment casting (IC)

(Patent novelty accepted by TIFAC, Letter No. T.I. (20)/TIFA/2012, Dated 22 -8-2012)

2. A wear resistant part having metal matrix composite (MMC) and process for preparing the metal matrix composite (Ref. No./ Application No. 2848/DEL/2013, Dated 26-09-2013)

Development of metal matrix composite (MMC) by hybridization of silicon moulding (SM) and investment casting (IC)

(Patent novelty accepted by TIFAC, Letter No. T.I. (20)/TIFA/2012, Dated 22 -8-2012)

3. A process for casting an article of molten metal (Ref. No./ Application No. 2474/DEL/2015, Dated 11-08-2015)

Reduction in cycle time of investment casting process by hybridization of fused deposition modelling, investment casting and vacuum moulding process

(Patent novelty accepted by TIFAC, Letter No. T.I. (29)/TIFA/2014, Dated 01 -4-2015)

4. A process for casting an article of molten metal (Ref. No./ Application No. 2475/DEL/2015, Dated 11-08-2015)

Combination of stir casting, vacuum moulding with ABS pattern based fiber reinforced shell of investment casting for preparing metal matrix composite

(Patent novelty accepted by TIFAC, Letter No. T.I. (29)/TIFA/2014, Dated 01 -4-2015)

5. Modified ultrasonic machining process (Ref. No. Indian Patent Application No: 202011001505 dated January 13, 2020, TEMP/E-1/1644/2020-DEL)

(Patent novelty accepted by TIFAC, Letter No. T.I. (65)/TIFA/2019, Dated 11 -4-2019)