



## Additive Manufacturing, Processes and ASTM/ISO Standards

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### Abstract:

Present the audience to the Additive Manufactured standardized process by ISO ASTM TC261 / F42 Joint Committee. Present what is Additive Manufacturing and its difference against 3d printing. Additive Manufacturing History and main milestones together with a Personal Journey in the technology, Additive manufacturing process as described in ASTM ISO 52900 and ASTM ISO 17296 : vat photo polymerization : VPP , sheet lamination : SHL, material jetting : MJT, material extrusion : MEX, directed energy deposition: DED, binder jetting : BJT, powder bed fusion : PBF . Qualification and Characterization Standards for a Additive Manufacturing based on ASTM ISO 17296, including quality control , performance and specifications for test methods and materials control. Market differentiation by processes, materials and manufacturers accordingly with public studies from 3dhubs and AMPOWER. Presenter is Member of ASTM F42 Member number 2066434 / ABNT CB026 and CEE261 Member number 578499 and ISO TC261 HOD Brazil for both 2019 TC261 International Meetings (Auburn, USA and Senlis, France).

### Biography:

Fabio Sant'Ana has Precision Mechanics degree and Business Administration Bachelor's, he has 29 years' experience in helping companies to acquire and take full advantage of 3d Machining and Additive Manufacturing Equipment. Entrepreneur and knowledge avid is member of standards organizations ASTM F42 Additive Manufacturing, ABNT CEE-261 Manufatura Aditiva e ABNT CB-26 Odonto-Médico-Hospitalar . CAD/CAM, Surface Modelling and EBM specialist by Arcam AB, Sweden and Machining Specialist by Willemin-Macodel , Switzerland,



he is passionate in connect people and companies to the right tools to accomplish the mission.

### Publication of speakers:

1. Fabio Sant'Ana et al; Cardiac Dysfunction Induced by Obesity Is Not Related to  $\beta$ -Adrenergic System Impairment at the Receptor-Signalling Pathway, 2015 Sep 21.
2. Fabio Sant'Ana et al; Absence of the Caspases 1/11 Modulates Liver Global Lipid Profile and Gut Microbiota in High-Fat-Diet-Induced Obese Mice, 2020 Jan 9
3. Fabio Sant'Ana et al; The orthotopic xenotransplant of human glioblastoma successfully recapitulates glioblastoma-microenvironment interactions in a non-immunosuppressed mouse model ,2014 Dec 8.
4. Fabio Sant'Ana et al; Biomechanical in vitro evaluation of three stable internal fixation techniques used in sagittal osteotomy of the mandibular ramus: a study in sheep mandibles, 2012 Jul-Aug; 20.
5. Fabio Sant'Ana et al; Oral Myiasis Caused by *Cochliomyia hominivorax* in a Disabled Person, 2015 Jul 21

3<sup>rd</sup> International Conference on 3D Printing and Additive manufacturing; May 22-23, 2020; Paris, France

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