

MARCO FERRARI		
Place and Date of birth:	Rome 06/09/1979	Nationality: Italian
Title: Primo Ricercatore	Institution: INAF-IAPS	
EDUCATION		
2010: University of Siena, Ph.D. in Earth Sciences. 2005: University of Siena, Master's degree in Geology, score 110/110 cum laude.		
KEY EXPERIENCE AND PROJECTS		
- Member of The Mars Sample Return - Sample Receiving Project (SRP) - Measurement Definition Team (MDT): Assessment of measurement and instrumentation needs for the MSR Sample Receiving Facility that will perform the first characterization and the curation of returned samples. - PI of the project: Investigating the ammonium-bearing phase in Ryugu samples and tracing the evolution process of C-Type objects: A Multi-analytical study of two returned samples from asteroid Ryugu (Hayabusa2/JAXA mission). - PI of the project: SIMILAR, a multidisciplinary study of Italian field sites as possible analogs of astrobiological interest: Managing the activity of sampling, curation, and laboratory measurements of geological samples with biological signatures. - Co-I of the project: Two refractory Wild 2 terminal particles from a carrot-shaped track characterized by combining MIR/FIR/Raman micro-spectroscopy and FE-SEM/EDS, 2012-2014 Curation and laboratory analysis of two returned samples by the NASA/Stardust mission. - Co-I of MWIR Imaging Spectrometer for Target-Asteroids (MIST-A)/Emirates Mission to the Asteroid Belt (EMA) - PI of: VIS-NIR and Raman measurement of clays and evaporitic products as analogs of Oxia Planum in the framework of the Rosalind Franklin rover mission - PI of: In situ measurements and sampling of biosignature-hosting products in support of organics detection in the context of ExoMars/2022: - Co-I of: CAPSULA (Chamber for Analogues of Planetary Surfaces Laboratory) project: - Member of the International - Mars Ice Mapper - Measurement Definition Team (I-MIM-MDT), 2021: - Member of the ExoMars Rover Science Operations Working Group (RSOWG) since 2020; - Member of the ESA-PROSPECT scientific team since 2019; - Associated scientist of the ESA-JUICE/MAJIS scientific team since 2018 - Member of the NASA-Dawn/VIR scientific team since 2017 - Co-I of Ma_MISS ESA/NASA Rosalind Franklin Mission since 2017: - Member of the ESA-Rosetta/GIADA scientific team, 2011-2014: - Member of the ASI-DUSTER scientific team, 2011-2014: Curation and mineralogical characterization of the samples collected in the upper stratosphere for the 2008, 2009, and 2011 flight campaigns.		
PUBLICATIONS		
- Ferrari, M. et al., (2023) Constraining the Rosalind Franklin rover/Ma_MISS instrument capability in the detection of organics. <i>Astrobiology</i>, https://doi.org/10.1089/ast.2022.0102 - Ferrari, M. et al. (2023) In situ measurement and sampling of acidic alteration products at Río Tinto in support of the scientific activity of the Ma_MISS instrument. <i>Frontiers in Astronomy and Space Sciences</i> https://doi.org/10.3389/fspas.2023.1197724 - Pisello, A., Ferrari, M. et al. (2022) Reflectance of silicate glasses in the mid-infrared region (MIR): Implications for planetary research. <i>Icarus</i> https://doi.org/10.1016/j.icarus.2022.115222 - Schröder, S., including Ferrari, M. (2021) Dwarf planet (1) Ceres surface bluing due to high porosity resulting from sublimation. <i>Nature Communication</i> https://doi.org/10.1038/s41467-020-20494-5 - Singh, S. K., including Ferrari, M. (2021) Origin of ammoniated phyllosilicates on dwarf planet Ceres and asteroids. <i>Nature Communication</i> https://doi.org/10.1038/s41467-021-23011-4 - De Sanctis, M.C., including Ferrari, M. (2020) Fresh emplacement of hydrated sodium chloride on Ceres from ascending salty fluids. <i>Nature Astronomy</i> https://doi.org/10.1038/s41550-020-1138-8. - Ferrari, M. et al. (2019) Reflectance spectroscopy of ammonium-bearing phyllosilicates. <i>Icarus</i>, https://doi.org/10.1016/j.icarus.2018.11.031		

- 8) Rietmeijer, F.J.M. including Ferrari M. (2016) Laboratory analyses of meteoric debris in the upper stratosphere from settling bolide dust clouds. *Icarus*, doi: 10.1016/j.icarus.2015.11.003
- 9) Rotundi A. including Ferrari, M. (2015). Dust measurements in the coma of comet 67P/Churyumov-Gerasimenko inbound to the Sun. *Science*, doi:10.1126/science.aaa3905
- 10) Ferrari, M. et al. (2014) Single minerals, carbon-and ice-coated single minerals for calibration of GIADA onboard ROSETTA to comet 67P/Churyumov-Gerasimenko. *PSS*. doi: 10.1016/j.pss.2014.06.006
- 11) Rotundi, A. including Ferrari M. (2014) Two refractory Wild 2 terminal particles from a carrot-shaped track characterized combining MIR/FIR/Raman micro-spectroscopy and FE-SEM/EDS analyses. *MAPS*. doi: 10.1111/maps.12274